NAVAL POSTGRADUATE SCHOOL Monterey, California



THESIS

A COST BENEFIT ANALYSIS OF SUPPLYING CONSUMABLE MATERIALS BY READY SUPPLY DEPOT (RSD) VERSUS COMMERCIAL VENDORS

by

Jose Ernesto B. Gaviola

December 2000

Thesis Advisor:
Associate Advisor:

Douglas Moses Kevin J. Maher

Approved for public release; distribution is unlimited.

20010124 066

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2000	3. REPORT Master's	TYPE AND DATES COVERED Thesis
4. TITLE AND SUBTITLE: A Cost Benefit Analysis of Supplying Con (RSD) Versus Commercial Vendors	isumable Materials by Ready Suj	pply Depot	5. FUNDING NUMBERS
6. AUTHOR(S) Gaviola, Jose Ernesto B.			
7. PERFORMING ORGANIZATION NAME(S) AT Naval Postgraduate School Monterey, CA 93943-5000	ND ADDRESS(ES)		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING / MONITORING AGENCY NAM N/A	ME(S) AND ADDRESS(ES)		10. SPONSORING / MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES			
The views expressed in this thesis are tho	se of the author and do not reflec	t the official	policy or position of the
Department of Defense or the U.S. Gover			
12a. DISTRIBUTION / AVAILABILITY STATEM	IENT		12b. DISTRIBUTION CODE
Approved for public release; distribution	n is unlimited.		,
13. ABSTRACT (maximum 200 words) The purpose of this study is to examin. Fleet units via a Ready Supply Depot (RSD) services currently provided by the RSD in effectiveness. This thesis focuses on the cooperation. This study compares the total price in the Cavite City and Manila area. The disconsumers of acquiring consumables from R consumer surveys are used to assess the servithat the compared items are less expensive to costly for the government to provide these in are not satisfied with the selection, quality, a recommendation is made to eliminate the commercial vendors for their non-military commercial vendors for the	order to fully maximize the use of ost the Navy pays to the supplier a ce of each item inventoried at RSD to ifference in price is multiplied by pRSD instead of directly from commercice benefits provided by RSD, as see to the customer when purchased at items via RSD. Furthermore, a customatical supplier in the result of the customer when purchased at items via RSD. Furthermore, a customatical supplier in the result of the customer when purchased at items via RSD. Furthermore, a customatical supplier in the result of the result o	e most cost-effif Fleet resource and all direct to a similar ite past demand to recial vendors. I en by its custor RSD. Howeve mer survey incels present at t	ective method of delivering the ces without sacrificing mission and indirect costs of the RSD cm sold by commercial vendors to determine the excess cost to Additionally, results from RSD mers. The research results shower, it also shows that it is more dicates that the RSD customers the RSD. As a consequence, the low the RSD customers to use
14. SUBJECT TERMS Consumables Ready Supply Depot Investigation	ntory Management		15. NUMBER OF PAGES

Unclassified NSN 7540-01-280-5500

OF REPORT

17. SECURITY CLASSIFICATION

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. 239-18

19. SECURITY CLASSIFICATION 20. LIMITATION

OF ABSTRACT

Unclassified

128 16. PRICE CODE

OF ABSTRACT

18. SECURITY CLASSIFICATION

OF THIS PAGE

Unclassified

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

A COST BENEFIT ANALYSIS OF SUPPLYING CONSUMABLE MATERIALS BY READY SUPPLY DEPOT (RSD) VERSUS COMMERCIAL VENDORS

Jose Ernesto B. Gaviola Lieutenant, Philippine Navy B.S., Philippine Military Academy, 1991

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL December 2000

Author:

Approved by:

Douglas Moses, Thesis Advisor

Kevin J. Maher, Associate Advisor

Reuben T. Harris, Chairman

Department of Systems Management

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

The purpose of this study is to examine the current Philippine Fleet (PF) method of supplying consumable materials to Fleet units via a Ready Supply Depot (RSD). The study desires to determine the most cost-effective method of delivering the services currently provided by the RSD in order to fully maximize the use of Fleet resources without sacrificing mission effectiveness. This thesis focuses on the cost the Navy pays to the supplier and all direct and indirect costs of the RSD operation. This study compares the total price of each item inventoried at RSD to a similar item sold by commercial vendors in the Cavite City and Manila area. The difference in price is multiplied by past demand to determine the excess cost to consumers of acquiring consumables from RSD instead of directly from commercial vendors. Additionally, results from RSD consumer surveys are used to assess the service benefits provided by RSD, as seen by its customers. The research results show that the compared items are less expensive to the customer when purchased at RSD. However, it also shows that it is more costly for the government to provide these items via RSD. Furthermore, a customer survey indicates that the RSD customers are not satisfied with the selection, quality, availability, and customer service levels present at the RSD. As a consequence, the recommendation is made to eliminate the Ready Supply Depot (RSD) operation and allow the RSD customers to use commercial vendors for their non-military consumable item needs.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRO	DUCTION 1
	A.	BACKGROUND 1
	B.	FOCUS OF RESEARCH
	C.	RESEARCH QUESTIONS4
	D.	RESEARCH METHODOLOGY 4
	E.	SCOPE OF THE STUDY 5
	F.	ORGANIZATION OF THE STUDY
II.	READ	SUPPLY DEPOT (RSD): THE NAVY'S SUPERMART
	WARI	HOUSE
	A.	INTRODUCTION 7
	B.	DEFINITION OF TERMS 7
	C.	RSD'S MISSION 8
	D.	RSD'S STOCKING POLICY/CRITERIA 10
	E.	MATERIAL CLASSIFICATION 10
	F.	REGULATIONS AFFECTING RSD OPERATIONS 11
		1. Background
		2. The Budget 12
		3. Procurement Program
		4. The Operating Program and Budget (OPB)
		5. The 72-100 Reimbursable Fund
		6. Naval Logistic Center and Operational Target

		7.	Innovations In 72-100 RF	17
	G.	CHAI	PTER SUMMARY	17
m.	DATA	ABASE	DEVELOPMENT, METHODOLOGY AND COST	
	COMI	PARISO	ONS	19
	A.	INTR	ODUCTION	19
	B.	DATA	ABASE FORMULATION	19
	C.	RSD I	PRICING METHOD	21
	D.	COST	RELATED DIRECTLY AT RSD	22
		1.	RSD Labor Requirements and Costs	22
		2.	RSD Non-Labor Requirements and Costs	25
		3.	Summary of RSD Labor and Non-Labor Costs	25
		4.	The "Charge Back Scheme"	26
	E.	PRICE	E COMPARISON WITH OUTSIDE COMMERCIAL	
		VEND	OORS	27
	F.	RESU	LTS	28
IV.	PRESI	ENTAT	TON AND ANALYSIS OF CUSTOMER SURVEY	31
	A.	INTRO	ODUCTION	31
	B.	INTER	RVIEW WITH AFP OFFICIALS	31
		1.	Interviewees	31
		2.	Objectives and Methodology of the Interview	32
		3.	Summary of Comments	33
	C.	SURV	EY DISTRIBUTION	34
	D.	SURV	EY OBJECTIVE AND DESIGN	36

	E.	SURVEY RESPONSE DATA	6
	F.	SUMMATION OF THE SURVEY RESULTS 4	5
V.	SUMN	MARY, ASSUMPTIONS, CONCLUSIONS, AND	
	RECO	MMENDATIONS4	7
	A.	SUMMARY	17
	B.	ASSUMPTIONS	18
	C.	CONCLUSIONS	18
	D.	RECOMMENDATIONS	51
APPE	ENDIX A	A. RSD CONSUMABLE ITEMS INVENTORY SALES FOR	
	·	CY 1999	55
APPE	ENDIX I	B. SELECTED RSD CONSUMABLE LINE ITEMS	79
APPI	ENDIX	C. SURVEY QUESTIONNAIRE	97
APPI	ENDIX	D. SUMMARY OF OMB CIRCULAR A-761	01
LIST	OF RE	FERENCES1	03
BIBI	JOGRA	PHY1	05
NIIT	יות דגד	STRIBUTION LIST1	07

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

1.	PN Organization From Ref. [4]	14
2.	RSD Consumable Items Inventory Sales for CY 1999	20
3.	Selected RSD Consumable Line Items	. 21
4.	RSD Organization From Ref. [5]	. 23
5	CY 1996-99 Annual Sales From Ref. [6]	. 26

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

1.	RSD Survey Respondents	. 34
2.	RSD Customer Benefits	. 41
3.	Local Vendor Customer Benefits	42
4.	Customer Recommendations	. 45

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENT

I would like to acknowledge those individuals who provided their support throughout the information gathering and writing phase of this thesis. First of all, I would like to thank the Lord for without Him none of this would have been possible.

I would like to extend my gratitude to my thesis advisors, Professor Douglas Moses and Commander Kevin J. Maher, for their encouragement, and valuable critical comments and helpful suggestions on the preliminary draft. They made this a better product than I could ever have imagined when starting out on this endeavor.

I express my appreciation to Commander Elmo Garrido and Lieutenant Colonel Romeo Poquiz for their patience and enthusiasm in answering my interview questions and providing their valuable expert comments and opinions.

I thank Colonel Simplicio Dang-Awan, Commander Ceasar Taccad, LT Paul Marcelo, LT Gerlo Elchico and Mrs. Menchie Marcelo for responding promptly to my frequent requests for information and coordination critical to conducting my research.

Most of all, I wish to express my deep love and gratitude to my wife, Olive, for the unwavering support and devotion throughout this thesis process.

I. INTRODUCTION

A. BACKGROUND

The Philippine Navy (PN) is a military organization that is interested in how to push logistics to the field in order to sustain military operations. The Navy's logistical structure, which is a part of the total Armed Forces of the Philippines (AFP) Logistics System, is involved in procurement, receipt, storage and distribution of supplies.

In order to accomplish the procurement function of logistics, the Navy has at its disposal different modes of procuring supplies, such as public bidding, negotiated purchases, emergency purchase, and others. Procurement of supplies and services shall be in accordance with approved programs, laws, regulations, policies, and procedures. In the application of any of these modes of procurement, diligence must be observed in order that, with the limited budget given, effective and efficient utilization of resources must be achieved to accomplish the mission.

Acquisition of supplies and services in the PN are subject to the usual government budgeting, accounting and auditing procedures. Before procurement is initiated, there must be an appropriation approved by Congress, which is subsequently released by the Department of Budget and Management (DBM) in the form of allotment advice.

In the early 1970's, procurement of supplies was hampered by the non-availability of approved appropriation. The budget was usually approved and released three to six months from the beginning of the fiscal year. Hence, the maintenance of operations was sacrificed due to non-availability of needed supplies. In order to address this gap between procurement and budget process, advance deliveries were initiated in order to accomplish

military missions. Although this violates current policy, it was always justified in support of military operations.

Realizing the predicament, the 72-100 Reimbursable Fund (RF) was introduced to the Armed Forces of the Philippines (AFP) in order to bridge the time lags that are common in the procurement and budget process. In this system, the AFP was authorized to borrow from the National Treasury an amount to purchase military supplies for stocking purposes. The Navy was allocated 20.00M Philippine Peso (PhP) out of the PhP200.00M for the entire AFP [Ref. 1]. This 72-100 RF was conceived to ensure continuity of supplies to support operations in spite of budgetary limitations. Thus, in midyear of 1975, the Headquarters Philippine Navy issued orders for the creation of the Ready Supply Depot (RSD) funded by 72-100 RF, as the supply outlet for the Philippine Fleet. The Philippine Fleet is one of the two major type commands of the Philippine Navy.

As the National budget decreases, government agencies and departments will be competing for minimal budget to carry out their mission. Activities that do not show economical and efficient use of public funds face further cut-backs, possible consolidation with other branches within the government, or possible elimination altogether. Many believe that government waste is running rampant and more savings can be made through elimination or realignment of government agencies. Improvements of this type are generally believed to be a critical necessity to reduce the National budget deficit.

The present AFP modernization thrust of streamlining organization due to changing political environment with tighter fiscal constraints affects the operations of

most supply units in the AFP. To help ensure that fiscal targets for readiness are met, the Philippine Fleet must find innovative ways to provide a quality product at an acceptable level of customer service and at minimum cost. This may include addressing issues concerning the operation of RSD.

B. FOCUS OF RESEARCH

The purpose of this study is to examine the current Philippine Navy method of supplying consumable material to the fleet and supporting shore activities via a "Retail Self Service Store" – the Ready Supply Depot (RSD). This thesis will focus on the following: (1) Cost effectiveness of the RSD operation within the Philippine Fleet; (2) a review and evaluation of the 72-100 RF role in RSD operation; (3) a review of the RSD mission, contribution to fleet readiness, operations, labor and non-labor cost, and customer service levels; and (4) a customer survey, conducted to determine customer's expectations about the operation of RSD, Philippine Fleet.

This thesis focuses on the initial purchase cost the RSD pays to the commercial supplier and all direct and indirect costs of the RSD operation. This study compares the total price of each item of inventory at RSD to a similar item sold by commercial vendors in the Cavite-Manila area. This difference is multiplied by past demand to determine the cost of providing the commercial services of a RSD operation. Additionally, a customer survey is used to determine if RSD Philippine Fleet is meeting its customers' expectations.

C. RESEARCH QUESTIONS

Based on the objectives cited above, the following primary research question is addressed in this study: "What is the most cost-effective method of delivering the services currently provided by the Ready Supply Depot, Philippine Fleet?

In support of the primary research question, the following subsidiary questions are addressed:

- What is the mission of Ready Supply Depot operation?
- What is the Navy Supply Systems' definition of consumable items?
- How does the RSD operate with respect to demand recording, reorder processing, inventory management and customer billing?
- Does RSD contribute to fleet readiness?
- What is 72-100 Reimbursable Fund, and how does this contribute to the operation of the RSD?
- What are the costs associated with the RSD operation within the Philippine Fleet?
- Is there another supply source aside from the RSD?
- Are the customers of the RSD receiving the best available quality at the lowest price through this RSD operation?
- What benefits can be realized if the RSD is eliminated?
- What benefits are lost if the RSD is eliminated?

D. RESEARCH METHODOLOGY

The information presented in this study was obtained through primary and secondary research. Primary research consists of personal and telephone interviews of

key personnel involved in the operation of the RSD, in the policy formulation of 72-100 RF, Naval logistics operations, and budget management. We also conducted a survey to all available current and previous supply officers of Philippine Fleet units from the Cavite-Manila area that have had experience transacting business at the RSD. Furthermore, we secured a list of consumable items stored and issued at the RSD, and compared the commercial vendor's price for the list of items identified in the RSD list.

The secondary research methodology employed was a review of relevant literature. We conducted an in-depth review of the RSD operation through examination of the Philippine Fleet supply management laws and regulation, implementing guidelines and program. The information we studied was obtained from current and past Department of National Defense (DND) and Philippine Navy instructions, directives, regulations, and previous theses and current publications relevant to government downsizing. Also, we researched books, magazine articles, and other library resources on the subjects of Consumables and Inventory Management.

Finally, we analyzed the result of the survey to determine the end-user's position towards the operation of the RSD, and evaluated and prepared the cost benefit analysis of consumable materials supplied at the RSD and that of commercial vendors.

E. SCOPE OF THE STUDY

This thesis focuses on the cost effectiveness of the RSD operations of the Philippine Fleet. A review of that RSD mission, contribution to fleet readiness, operations, labor and non-labor costs, and customer service levels was conducted. Additionally, a customer survey was used to determine if RSD Philippine Fleet was meeting it's customers' expectations.

This thesis focuses on the following: (1) Cost effectiveness of the RSD operation at Philippine Fleet; (2) a review and evaluation of the 72-100 RF role in RSD operation; and (3) a review of the RSD mission, contribution to fleet readiness, operations, labor and non-labor cost, and customer service levels. Additionally, a customer survey is used to determine if RSD Philippine Fleet is meeting it's customers' expectations.

F. ORGANIZATION OF THE STUDY

This thesis is organized to give the reader a comprehensive overview of the RSD operation and why Naval Logistic Center has encouraged its use. Chapter II identifies RSD mission, regulations, and stocking policy. Chapter III examines RSD inventory and identifies the material mainly supplied by RSD. The cost of the items, including the initial purchase cost and all labor and non-labor costs, are then computed and multiplied by past demands to estimate the total cost the government (the customer) pays for materials sold through RSD. Chapter IV evaluates the effects on customer and fleet readiness of its RSD operations by reporting the results of a survey, which was distributed to RSD customers. Chapter V provides a summary, conclusions, and recommendations on how the Navy can better meet the needs of its customers with regards to consumables of the type provided by the RSD.

II. READY SUPPLY DEPOT (RSD): THE NAVY'S SUPERMART WAREHOUSE

A. INTRODUCTION

This chapter focuses on the Ready Supply Depot (RSD), specifically RSD, Cavite. In doing so, several terms and secondary questions identified in chapter I are addressed to assist the reader: (1) to understand why the Naval Logistic Center (NLC) has encouraged the use of RSDs; and (2) to identify various rules and regulations that effect RSD operations.

B. **DEFINITION OF TERMS**

- a. <u>72-100 Reimbursable Fund (72-100 RF/72-1 RF)</u>. A stock fund established as one source of fund for procurement of supplies and materials. It is a "revolving" ceiling, which is maintained through replenishment from appropriations based on their respective withdrawal from stocks.
- b. <u>72-100 Supplies</u>. Stocks procured, stored, issued and accounted for from the PhP20M 72-100 RF of the PN, which are intended to bridge the time lags that are common results from the procurement and budget process.
- c. <u>72-100 Counter-Part-Fund</u>. One of the logistics budgetary activities programmed to support the withdrawals of 72-100 RF supplies.
- d. <u>Consumable Items</u>. Any item which, after issue from stock to the final user, is consumed in use; or while having continuing life, becomes incorporated in other property, thus losing its identity when it is dropped from property accountability.

- e. <u>Deferred Accounts</u>. Receivables of the PN 72-100 RF which are issued as unfounded transactions in the Requisition and Issue Voucher (RIV).
- f. <u>Dormant Stocks</u>. The 72-100 stocks that are no longer saleable to customer units due to obsolescence or wear.
- g. Operating Targets (OPTARs). The 72-100 ceiling allocated to each unit per quarter consistent with the quarterly release of funds.
- h. <u>RF Administrator</u>. The duly designated unit/office that exercises the supply management of 72-100 RF.
- i. <u>Subordinate units</u>. Refers to subordinate units of the PN major type commands, support commands and service support units, and operational commands.
- j. <u>Unit</u>. Used in this paper refers to the PN major unit type commands, support commands and service support units, and operational commands.
- k. Wholesale. Used in this paper referring to selling goods in large quantities as defined by the Philippine Navy.

C. RSD'S MISSION

The Naval Logistic Center (NLC) has been providing supply outlets (RSD) where its customers can serve themselves to needed supplies with minimal delay. This form of retail operation was originated by the Armed Forces of the Philippines Logistic Command (AFPLC) and continued by the three AFP services (namely, Army, Air Force and Navy) as a way to reduce the requisitioning workload and still satisfy customer demand. RSDs were seen as an efficient, economical, and expeditious means of providing supply support to Navy customers for high demand, low cost consumable

items. The discount warehouse method typical of a RSD operation has resulted in an appreciable reduction in processing costs since each customer could procure multiple units of several different line items with a single requisition document. If the demands were submitted to a wholesale stock point, such as an AFP Logistic Command, requisition documents for each line item would be necessary.

The mission of the RSD is to manage the receipt, storage, accounting and issuance of PN locally procured, fast-moving supplies by employing a "supermart" concept of operation. Coupled with this mission are the following functions: [Ref. 2]

- Determine fast-moving common supply requirement of PN units in coordination with inventory control division.
- Inspect, receive, store, issue and account supply materials procured through 72-100 operations.
- Receive, screen and process documents for accuracy and completeness of required data including the authenticity of the authorized signatories.
- Maintain stock records, receipts and expenditure documents affecting the stock balance to ensure the availability of supplies within the authorized level.
- Determine and maintain book of accounts for the 72-100 RF fund, and record the value of materials received and issued.

With simplified accounting procedures allowing customers to purchase up to a pre-approved monetary limit vice an individual requisition per line item, it is the RSD's intention to meet the following objectives:

- Expedite and improve service to customers.
- Decrease the costs of furnishing material to the customer.

- Decrease the number of requisitions in process by the distribution/warehouse.
- Decrease the number of high priority requisitions in the system.
- Reduce the number of transactions covering material returned.
- Reduce the inventory in the possession of the customer by affording more expeditious service.

D. RSD'S STOCKING POLICY/CRITERIA

To provide guidelines as to what RSD can carry in stock, NLC prescribed that the items carried must meet the following criteria:

- The items must be fast-moving items with recurring demand.
- The items must have a minimum demand of two units per month sustained over a 12-month period.
- The items must not be repairable, critical, or classified.

In addition, although the stock levels of individual items may vary, the average on hand inventory over all items must be less than a 30-day supply.

E. MATERIAL CLASSIFICATION

RSD Cavite is similar to all other RSD operations in that the materials sold are identified as "consumables". Naval Logistics defines consumable material as any material, which, after issue from stock to the final user, is consumed in use; or while having continuing life, the material becomes incorporated in other property, thus losing its identity when it is dropped from property accountability [Ref. 3]. Generally, consumable items are not repaired when unfit for further service. The consumable category includes office supplies, culinary supplies, clothing, and military specific items

(e.g. military uniform paraphernalia, flag and pennants, RIV and dispatch forms).

Consumable items are sometimes referred to as "expense" items.

In contrast, other significant classifications of material procured and stocked by NLC are "repairables" and "repair parts". A repairable is an item of supply that can be made to function through a repair process after it breaks. It is also referred to as an "investment" item. Repairables include major components of equipment such as aircraft engines, ship propeller shafts, and electronic circuit boards. RSDs are not allowed to stock repairables. Repair parts are also not part of the consumable items that are being managed by the RSD. Repair parts are items such as resistors, Integrated Circuits (IC) and all parts necessary to repair communication or other electronic equipment. The Naval Repair Facility, NLC, is managing those items.

F. REGULATIONS AFFECTING RSD OPERATIONS

1. Background

Like any other government organization, RSD has many other rules and regulations they are required to follow in their operation. Although the government's primary interest in procuring goods and services is to obtain them on a competitive, least-cost basis, the government also uses the procurement process to ensure that various socioeconomic objectives are met.

In order to accomplish the procurement function of logistics, the Navy has different modes of procuring supplies such as public bidding, negotiated purchases, emergency purchase, and others. Procurement of supplies and services shall be in accordance with approved programs, laws, regulations, policies and procedures. In the application of any of these modes of procurement, diligence must be observed in order to

ensure the given limited budget provides effective and efficient utilization of resources, which must be achieved to accomplish the mission.

2. The Budget

Acquisition of supplies and services in the PN are subject to the usual government budgeting, accounting and auditing procedures. Before procurement is initiated, to support needed military activities for a fiscal year there must be an appropriation approved by Congress, which is subsequently released by the Department of Budget and Management (DBM) in the form of an "allotment advice".

In coming up with a budget for any activity, the requirement determination is the first step undertaken. Requirement determination includes identifying the items needed for a particular activity, the number of those items needed, and their price. This may range from the smallest and seemingly unimportant items to the largest and the most important items, say from paper clips to the major parts of a ship's engine. After identifying the item, the desired quantity is determined using the allowance list, consumption data and demand data. Once the quantity is known, prices are attached to each item, and the budget is determined. Requirement determination is a function inherent at all levels of management. Each processing unit in the navy is expected to develop budgetary figures founded on proper requirement determination. Budgetary figures are not obtained by picking these from thin air. There must be a solid basis for developing the budget. Result: the determination of the requirement is very crucial.

3. Procurement Program

The items, quantities and prices determined in the requirement determination will form the foundation of a procurement program of a unit, which is approved by its commanding officer. The units' procurement program is collated at Headquarters Philippine Navy (HPN) for approval of the Flag Officer-in Command (FOIC), PN. This document contains all the items for all the budgetary activities of the navy. It will serve as the "bible" in the acquisition of supplies and services.

It was mentioned earlier that there are different methods of procuring materials. These are public bidding, emergency purchase, negotiated purchase, and others. Before a unit can perform the procurement function, it must be delegated the authority to perform the task. The Department of National Defense (DND), Department Order Number A-095 dated August 24, 1988 which amended DO NR A-047 dated 22, August 1987, delegated the authority to procure supplies and services to various units of the AFP to include the Philippine Navy. At present all major type commands, support commands and special units, and operational commands in the Philippine Navy are delegated the authority to procure. An organizational chart is provided in figure 1 to depict the revised navy organization as defined in the AFP Modernization Program [Ref. 4].

4. The Operating Program and Budget (OPB)

In the PN OPB each procuring unit is allocated its budget into two components — the Centrally Managed Fund (CMF) and the Direct Support Fund (DSF). The CMF is managed at the Headquarters Philippine Navy (HPN) while the DSF is periodically released to the units in the form of "allotment advice" by the HPN. This allotment advice is duly accompanied by a corresponding cash allocation. There is no hard and fast rule on the percentage of CMF and DSF to the net working appropriation. The units in their respective procurement programs often determine this percentage.

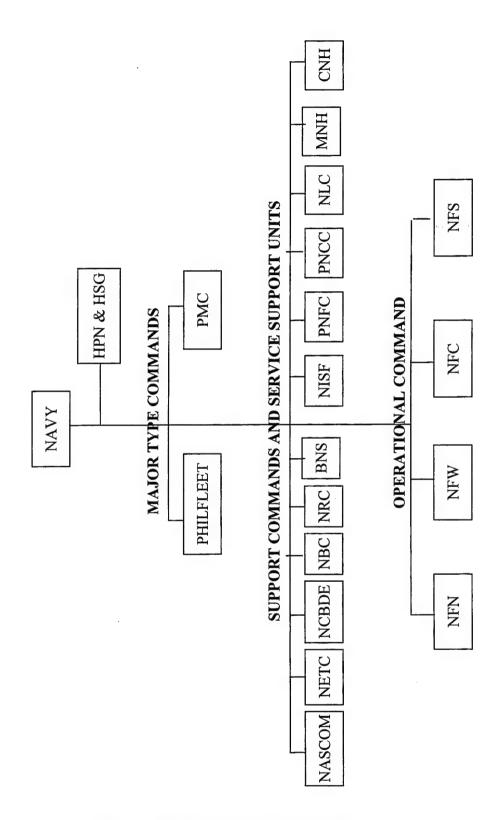


Figure 1. PN Organization From Ref. [4]

In the Operating Program and Budget of the PN, all the major and special units are appropriated funds for supplies and services to support their operations. Included in the logistics budgetary activities, among others, are ship spares, quartermaster supplies, shipboard supplies, Combat Clothing and Individual Equipment (CCIE), and 72-100CPF (Counter-Part Fund). With this appropriation, the units can procure 72-100 stocks from Naval Logistic Center (NLC) through RSD by using funded Requisition Issue Vouchers (RIV), or they can procure supplies outside of NLC using delegated authority to procure. This appropriation is released by DBM in the form of allotment advice with corresponding cash allocation.

5. The 72-100 Reimbursable Fund

In the PN Manual 72-1 Management it is stated that the 72-100 Account is an executive authorization to borrow from the National Treasury a fixed amount to purchase military supplies for stocking purposes. The 72-100 is a reimbursable fund, utilized primarily to effect continuity of supplies to support operations, subject to budgetary limitations. The value of the supplies issued from the stockpile must be supported by and charged against current appropriation to validate the issuance. In other words, no supplies can be issued from this account unless sufficient funds are available. Hence, maximum utilization of this extra-budgetary resource demands proper administration, wise supply management and supervision.

In the General Headquarters (GHQ) Logistics Letter dated August 24,1976, the PN was granted additional RF ceiling through initial grants, cash or stock transfers from Armed Forces of the Philippines Logistics Center (AFPLC) in the total amount of P20.00M. During the initial operation of the 72-100 RF, the 72-100 was utilized to fund

the procurement 72-100 stocks before budget was approved in order that the stocks are made available when money is released. The concept is to bridge the gap between procurement system and budget system. Again in GHQ Circular Number 4 dated August 06, 1974, it stated that all 72-100 stocks should be issued only after a duly approved and funded RIV is submitted except in cases where the Chief of Staff AFP orders deferment of payment. In the PN only the FOIC, PN can authorize deferment of payments.

6. Naval Logistic Center and Operational Target

GHQ Circular Number 4 dated August 06, 1974 was published to prescribe the policies and assign responsibilities in the management and accounting of 72-100 RF. In this circular the Naval Logistic Center (formerly Naval Supply Center) is the designated PN RF Administrator for 72-100 supplies.

The NLC, as the 72-100 RF Administrator, is given a copy of the procurement program for the 72-100 CPF. Likewise, the 72-100 RF Operational Targets (OPTAR) of PN units are released in the form of allotment advice to NLC on a quarterly basis. This OPTAR is not yet part of the 72-100 RF that can be used for procuring supplies. It must be liquidated through withdrawals of 72-100 supplies by units using funded RIVs. The OPTAR is then transformed into usable funds for stock replenishment of 72-100 supplies.

The NLC keeps a record of the units and their subordinate units' OPTAR allocation. All 72-100 withdrawals are posted on that record. Based on the procurement program, the NLC then procures items for replenishment, which depletes the available funds while still in the form of an allotment advice, which requires cash allocation for liquidation.

7. Innovations in 72-100 RF

In the AFP Comptroller Letter 88-8 dated October 04, 1988, it is stated that the issuance of supplies from 72-100 stocks shall be a "cash and carry" basis. Checks shall be issued covering the funded RIVs. The 72-100 RF Administrator shall then deposit these proceeds from sales/issues to a separate current account with any government depository bank.

With this cash and carry concept the 72-100 RF Administrator will be able to build up cash in the bank that can be used for any subsequent procurement of supplies for stocking at NLC. This frees the procurement process of the system for stock replenishment from its dependence on appropriation. Furthermore, once the NLC buys supplies for stocking, it can negotiate with the dealers for lower prices because they are assured of fast cash payment. Likewise, NLC can buy directly from the source without the mediation of a third party, which are usually the dealers. This will assure the NLC of much lower prices and will encourage the units to patronize the 72-100 stocks. It is the delay in liquidation that discourages direct suppliers to transact business with the government.

G. CHAPTER SUMMARY

This chapter explained the difference between the consumables, repairables, and repair parts. It identified mission, functions, and stocking policy/criteria of a RSD operation. It also covered the regulations affecting RSD operation such as the budget, the procurement program, the 72-100 Reimbursable Fund, Naval Logistic Center and its operational target, and some definition of terms that will help in understanding the creation of the Ready Supply Depot.

The next chapter provides the database formulation, determination of the RSD operational cost, and comparison of the RSD price with similar items sold by commercial vendors in Cavite-Manila area.

III. DATABASE DEVELOPMENT, METHODOLOGY AND COST COMPARISONS

A. INTRODUCTION

This chapter explains which consumable items at RSD were chosen for analysis, analyzes the RSD procurement markup, identifies the operating costs of the RSD, and concludes with a cost/benefit analysis of the price difference of purchasing similar items from commercial vendors. The information developed for the study is a comparison of total costs of the demand for consumable items over a one year period (January 1999 through December 1999) as presented in Appendix A.

B. DATABASE FORMULATION

As of December 1999, the RSD sold a total of 602 line "consumable" items in their inventory, composed of both military and non-military items. These items range from Cap to Wiper Motor Assembly. (See Appendix A.) Those considered as military items are items specifically intended for military (navy) use like, Flag and Pennants, uniform paraphernalia, and military record forms. Non-military items are items that are commonly used by both the civilian and the military and are readily available in local stores like janitorial supplies and office supplies.

Our study focuses on 432 line items, representing 72% of the total inventory sale. These 432 line items are procured from the current navy dealers; they represent the items currently available from established sources and items for which there is cost data from the current year. The RSD is still using the year 1999 procurement transactions as price reference in procuring the consumable items for the year 2000. Furthermore, these items

are considered to be non-military items and thus available from commercial vendors. The remaining 170 line items (28% of the total inventory) were disregarded because most of these items are military items. With such a large proportion of material supplied, we believe that our sample of line items and their costs is a fair representation of the RSD operation.

Overall, we analyzed over 307 line items (70%) that had accurate RSD price data, were commonly available at local vendors, and were similarly equivalent to a RSD item. The remaining 125 line items were eliminated because of insufficient RSD price data, or because we could not find a matching similar item from commercial vendors (for example, coffee cup with Navy logo).

The initial database, Appendix A, which consists of each item's stock number (C1), nomenclature (C2), unit (C3), RSD selling price (C4), annual demand data (C5), and annual total sales per line item (C6) was provided by the RSD. Annual sales were computed by multiplying the RSD unit-selling price by each item's annual demand (C6 = $C4 \times C5$). A sample of this database is shown in Figure 2.

C1	C2	C3	C4	C5	C6
STOCK NUMBER	NOMENCLATURE	UNIT	RSD PRICE	ANNUAL DEMAND	ANNUAL SALES
CLOTHING				·	
8405-PN-00-5310	BDA W/CAP	PR	544.00	6	3,264.00
8440-00-R10-0335	BELT, NYLON BLK	EA	50.00	115	5,750.00
8440-PN-00-4873	BELT, WAIST BLK WEB	EA	24.00	78	1,872.00
8420-00-R10-0127	BRIEF, COTTON WHITE	EA	45.00	135	6,075,00
8315-PN-000-5306	BUCKLE, BRASS W/O LOGO	EA	42.00	15	630.00

Figure 2. RSD Consumable Items Inventory Sales for CY 1999

The second database, Appendix B, was developed from Appendix A and includes the 307 selected items. Appendix B shows the RSD price (C4), RSD operating cost (C5) given as a percentage of each peso of sales used by the author as "charge back scheme" as explained in Section D-4 of this chapter, adjusted RSD price (C6), and local vendors price (C7). Column C8 is the difference between the RSD and retail price, column C9 is the difference between the adjusted RSD and retail price, column C10 is the annual demand, column C11 is the excess cost/savings to the Philippine Fleet (PF) units if the items are procured from RSD vice local vendors (computed as C11 = [C4 - C7] * C10), and column C12 is the excess cost/savings to the government to provide the items via RSD vice using local vendors (computed as C12 = [C6 - C7] * C11). Negative numbers for C8, C9, C11 and C12 represent cost savings for RSD as compared to local vendors. Positive numbers represent excess cost. The results are discussed in detail later in this chapter. The sample of this database is shown in Figure 3.

CZ	СЗ	C4	C5	C 6	C7	C8	8	C10	C11	C12
		RSD	OP ER	ADJRSD	VENDOR	DIFF	DIFF	ANNUAL	PFunits	COVT
NOMENOLATURE	UNT	PRICE	œst	PRICE	PRICE	(C4-C7)	(05-07)	DEMAND	cost	cost
BELT, NMLNBLK	EA	50.00	0.12	56.00	56.25	(6.25)	(0.25)	115	(718.75)	(28.75)
BELT, WEBBLK	EA	24.00	0.12	26.88	27.00	(3.00)	(0.12)	78	(234.00)	(9.36)
BRIEF, COTTON	ΕA	45.00	0.12	50.40	40.50	4.50	990	135	607.50	1,336.50
	NOMENOLATURE BELT, NMLNBLK BELT, WEBBLK	NOMENCLATURE UNIT BELT, NM.NBLK EA BELT, WEBBLK EA	NOMENCLATURE UNT PRICE BELT, NMLNBLK EA 50.00 BELT, WEBBLK EA 24.00	RSD CPER NOWENCLATURE UNIT PRICE COST EELT, NMLNBLK EA 50.00 0.12 EELT, WEBBLK EA 24.00 0.12	RSD CPER ADJRSD	RSD CPER ADJRSD VENDOR	RSD	RSD CPER ADJRSD VENDOR DIFF DIFF	RSD CPER ADJRSD VBNDCR DIFF DIFF ANNUAL NOMENCLATURE UNIT PRICE COST PRICE (C4C7) (C5C7) DEWAND BELT, MINBLK EA 50.00 0.12 56.00 56.25 (6.25) (0.25) 115 BELT, WEBBLK EA 24.00 0.12 26.88 27.00 (3.00) (0.12) 78	RSD

Figure 3. Selected RSD Consumable Line Items

C. RSD PRICING METHOD

The RSD pricing method is designed to calculate estimates of the total cost to the taxpayer for all the effort involved in the procurement and distribution of a given item.

According to LT Elchico [Ref. 5], the shelf price of the items sold at the RSD is

calculated by incorporating all associated costs to produce the item such as, procurement mark-up, storage, handling, and transportation. The procurement mark-up is approximately 10% to 20% additional charge to the procured supplies delivered by the supplier. This means that if the cash price of the procured supplies is PhP100, 000.00, the supplier can ask up to PhP110, 000.00 to PhP120, 000.00. This is brought about by the long lead-time it takes to liquidate the Procurement Orders that usually take about three to four months. This delay in liquidation obliges the suppliers to mark-up the prices to recover the cost of money they invest. For some transactions, the storage, handling, and transportation are associated costs that are enumerated as separate costs from the cost of the supplies itself but still covered in a single Procurement Order. An example of this item is the acetylene (refill) taken from the nearest government authorized gasoline station. Overall, 20% to 30% of the procurement cost is added to produce the shelf price of each item sold at the RSD. [Ref. 6]

D. COST RELATED DIRECTLY AT RSD

There are numerous costs associated with the operation of the RSD facility. The costs discussed below are obtained from the interview with the supervisor of the RSD and are broken down into labor and non-labor costs.

1. RSD Labor Requirements and Costs

Currently seventeen people are required to operate an RSD (Figure 4): a Commanding Officer (CO), an Executive Officer (XO), four Administrative Personnel, five Inventory Control Personnel, and six Storage Personnel.

The CO assisted by the XO plans, coordinates, and directs the inventory management of RSD. He/She ensures the RSD maintains records of fast-moving common

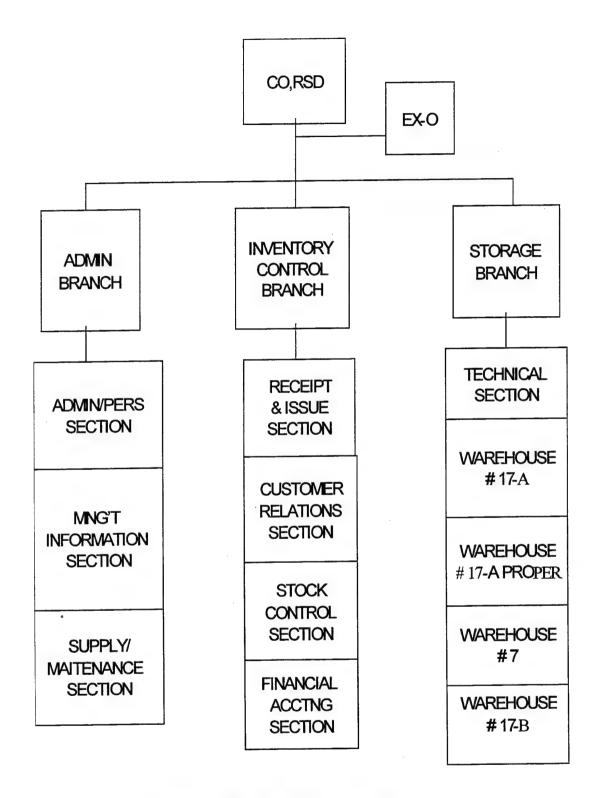


Figure 4. RSD Organization From Ref. [5]

supply requirements of PN units, in coordination with the inventory control branch. He is responsible for the supplies procured through 72-100 operations. Additionally, the CO actively interfaces with RSD customers to determine the degree of customer satisfaction and with store personnel to ensure conformance to established inventory, warehousing, sales, and safety rules and regulations. The CO analyzes customers' shopping lists and submits requests for item establishment to the NLC to enhance store effectiveness.

The Administrative personnel provide the administrative, personnel management services and operational supply requirement of the depot, including the preparation, processing and filling of all incoming and outgoing communication and correspondence. They operate the 72-100 inventory and computer system. Also, they coordinate the supply and maintenance requirement of the division.

The inventory control personnel conduct activities necessary to determine fast-moving supplies requirement of PN units. They manage the 72-100 revolving fund and supplies, control material receipts and issuances, and conduct timely ordering of supplies. They operate in four sections, namely: Receipt and Issue Section, Customer Relations Section, Stock Control Section, and Financial Section.

The major duty of storage personnel is to inspect, receive, store, safeguard and issue locally procured supplies. They maintain the systematic display of materials and the stock locator cards; they are responsible for cleaning and up-keeping the storage facilities. They also perform technical research to complete the specification of items carried under the 72-100 RF.

The direct labor cost for the seventeen RSD employees was P 2,437,384.08 for the period of this study [Ref. 6]. This figure was provided by the RSD. It includes all monetary awards distributed during this time frame and all employee additional benefits.

The Labor Cost associated with RSD for the one-year period is summarized as follows:

Personnel	Salary
2 Officers	P 481,036.80
7 Enlisted	1,140,347.28
8 Civilian	816,000.00

Total Labor Cost **P 2,437,384.08**

2. RSD Non-labor Requirements and Costs

The RSD non-labor costs can be broken down into the following cost categories: utilities, maintenance, transportation, communications, office equipment, and mission support. The summary of these requirements and costs is provided below:

Requirements	Costs
Utilities	15,600.00
Transportation	3,000.00
Maintenance	5,000.00
Communication	2,000.00
Office Equipment	9,700.00
Mission Support	10,000.00
Total Non-Labor Cost	45,300.00

3. Summary of RSD Labor and Non-Labor Costs

In order to determine the total annual operating costs associated with operating RSD, the Total Labor Cost is added to the Total non-Labor Costs as presented below.

Expense Item Labor Non-labor	Costs 2,437,384.08 45,30 0 .00
Total Annual Operating Costs	2,482,684.08

4. The "Charge Back Scheme"

The "charge back scheme" is defined and use by the author as a way to recover the operational cost associated with providing the items to the RSD customers.

Currently, the RSD does not reflect this operating cost in its "shelf-selling" price. It is the RSD policy to charge the customer the same unit price paid in purchasing the item from its source. However, in this study, the researcher adds back into the RSD selling price an allocation of annual operating costs outlined above, to reflect and quantify the cost of each item sold at the RSD. This higher price incorporating operating costs is referred to as the RSD adjusted selling price. The purpose of this scheme is to have a total unit cost figure in determining the cost/savings for the government in providing the consumable items via RSD or via commercial vendors.

To determine the RSD adjusted price, the total annual operating cost is divided by the total annual sales. Figure 5 shows the annual sales record from 1996 to 1999. There is a similarity of sales value from 1996 to 1998, averaging PhP14.75M, however, there was a large increase in 1999. This increase was caused by the change in the 72-100RF allocations for the Philippine Fleet units, which took effect in 1999.

YEAR	TOTAL ANNUAL SALES
1996	P14.591M
1997	14.901
1998	14.779
1999	20.174

Figure 5. CY 1996-99 Annual Sales From Ref. [6]

The author used the 1999 annual sales because this is seen to best reflect future sales. The annual operational cost is also based on the CY 1999 amount. The computation for the RSD operating cost given as a percentage of each peso of sales is:

$$\frac{\text{Total Annual Operating Cost}}{\text{Total Annual Sales}} = \frac{2,482,684.08}{20,173,814.40} = 12\%$$

This percentage of operating costs to sales is used to provide an estimate of the Adjusted RSD Selling Price. In order to obtain the Adjusted RSD Selling Price, the RSD Selling Price is multiplied by 1.12 (that is 1.00 + .12). The following example is provided:

	RSD	Operating	Adjusted RSD
Nomenclature	Selling Price	Adjustment Cost	Selling Price
Masking Tape 2"	186.00	1.12	208.32

The RSD Selling Price is the cost for the Philippine Fleet (PF) units to obtain an item at the RSD. The Adjusted RSD Selling Price is the cost for the government to provide the item to the PF units.

E. PRICE COMPARISON WITH OUTSIDE COMMERCIAL VENDORS

At this point in our study a price comparison was conducted between the 307 line items sold at RSD with similar items obtained from nearby commercial vendors. It was the intention of the researcher to see if the RSD customers could still purchase consumables from commercial vendors without a reduction in fleet readiness if the RSD operations were closed or eliminated. The commercial vendors that were selected by the author were SM Mall, National Bookstore and Ace Hardware. These three vendors are representative of available commercial vendor sources because of their location, selection, quality, and competitive prices.

To assure a fair comparison, similar items were compared. This resulted in an extensive analysis of each item located at the RSD through a detailed description in the given consumable items list. Once a similar item was found at one of the commercial vendors, its retail price was logged into the database.

A difference between vendors' price and the RSD selling price would indicate whether or not the PF units would experience an excess cost or a savings by purchasing their consumables at local vendors. Likewise, the difference between the vendors' price and the adjusted RSD selling price would indicate whether or not the government would experience an excess cost or a cost savings by providing the consumable items via RSD.

Appendix A provides a listing of the material the RSD sold along with unit price and demand (January 1999 through December 1999). Appendix B compares the total cost (procurement and RSD operational cost) to the Philippine Government of the 307 line items to the total cost of obtaining the same material from commercial vendors. These appendices were used to show the cost/savings that can be obtained if a local vendor was the primary supplier without RSD.

F. RESULTS

By comparing the RSD price and that of the commercial vendors' price, it appears economically practical for the PF units to purchase their consumable items at the RSD because this will lead to a total savings of PhP538, 904.07 for the 307 compared items.

Total Cost from Commercial Vendors (C7 x C10): PhP 15,963,487.17

Total Price Charged to PF units (C4 x C10): - 15,424,583.10

Cost Savings to PF units (C11): PhP 538,904.07

However, the study also shows that the government realizes a total excess cost of PhP1,312,045.90 for providing the 307 items compared to purchasing them from commercial vendors.

Total Cost of Providing Items via RSD (C6 x C10):

PhP 17,275,533.07

Total Cost of Obtaining Items from

Commercial Vendors (C7 x C10):

- 15,963,487.17

Excess Cost incurred by the Government (C12):

PhP 1,312,045.90

The figures presented in the above computations are taken from Appendix B.

The next chapter discusses the issue brought out by the interview and the survey results to see if customers want to continue using the RSD or would rather use commercial vendors.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. PRESENTATION AND ANALYSIS OF CUSTOMER SURVEY

A. INTRODUCTION

The previous chapter discussed the analysis of costs of the RSD operation in providing services to the Philippine Fleet units. This chapter discusses the qualitative analysis of knowing the value of the RSD operations to its customers. The data used by the author in this study is the combination of both interview and survey results.

B. INTERVIEW WITH AFP OFFICIALS

1. Interviewees

The author conducted interviews with Filipino military officers studying at the Naval Postgraduate School (NPS) and at the Defense Resource Management Institute (DRMI). Interviews were conducted with the following:

- Commander Elmo Garrido Philippine Navy, former Plans and Program

 Branch Chief of the Assistant Chief of Staff for Logistics, Philippine Navy
- Lieutenant Colonel Romeo Poquiz Philippine Air Force, former Fiscal
 Management Division Chief of the Assistant Chief of Staff for Logistics, Armed
 Forces of the Philippines (AFP)
- Major Joel Enrile Philippine Army, the present Executive Officer of AFP Logistic Command.

Likewise, Lieutenant Gerlo Elchico Philippine Navy [Ref. 5] relayed to the author the personal comments of the following persons on the current RSD operations:

- Lieutenant Napoleon Pascua Philippine Navy, Commanding Officer of Supply Material Unit, Philippine Fleet, and
- Mrs. Concepcion Amiller, Depot Supervisor, RSD.

2. Objectives and Methodology of the Interview

The primary objective of these interviews was to have a better understanding of how the AFP, particularly the Navy, provides consumable supplies to their corresponding military units. It was also the intention of these interviews to determine the current Navy procurement rules and regulations, especially that of the 72-100 RF, and how these rules and regulations affect the Navy depot operation.

The interviewees are all AFP officials who have had experience in the procurement process, policy formulation of 72-100 RF, logistics and budget management. Their comments reflect the current views of the procurement policies of the AFP in general and of the Navy in particular. Therefore, their comments provide a basis to define further issues associated with the operation of a supply depot.

A personal discussion with the interviewees was the method used in gathering information for this study. This was also followed up by a series of telephone conversations. The researcher asked the officials the following questions while noting their comments:

- What are the rules and regulations in the AFP particularly the Navy procurement process?
- How responsive is the current procurement process?

- How does this process affect the operation of Navy depot in providing consumable items to the units?
- What recommendation is necessary to solve this problem?

3. Summary of Comments

The comments of the interviewees are summarized below:

- The rules and regulations pertaining to the procurement process are similar throughout the entire AFP. These rules and regulations require further evaluation in order to be responsive to the changing business demand. The most common problem that should be given consideration is the mode of paying suppliers. The objective is to improve AFP promptness of payment to the suppliers in order to encourage more participants in the procurement bidding, thus increasing competition. Without competition, the AFP may lose the ability to obtain quality products or services at a fair and reasonable price.
- There is a need to further evaluate the role of supply depots in providing services to the AFP/Navy units. An attempt to study the use of commercial vendors, as an alternative source for consumable items should be conducted in order to maximize utilization of these vendors' presence in almost every part of the country. In other words, a study should be conducted for probable outsourcing of AFP supplies and services.
- There is a need to improve supply depot operations in terms of supply distribution, quality and availability of items on the shelf, and the utility of 72-100 RF.

The above comments led the researcher to study the policies and guidelines pertaining to the procurement process as presented in Chapter II. It also shows the willingness of the officials to look for a better way of improving the system of providing supplies to the units.

To further validate the comments made by these officials, the researcher conducted a customer survey of the depot under study, which is the RSD, NLC. The next section will discuss this process.

C. SURVEY DISTRIBUTION

An additional dimension of this thesis was obtained from a survey completed by RSD customers. There are seventy-eight (78) units under Philippine Fleet who are required to procure consumable items at RSD by using their allocated 72-100 RF. We identified forty-five different units (customers) from the RSD "log-in" sheet dated December 1999 and asked these customers to complete the survey. The remaining thirty-three (33) units not included in the list were those units, which were deployed outside Cavite-Manila area. Out of forty-five customers, forty-one completed the survey (a response rate of ninety-one percent) and they represent approximately fifty-four percent of all the units that RSD supports. These 41 respondents represent more than half of the total RSD customer base upon which we can draw conclusions. The customers involved in the survey are listed in Table 1.

Table 1 RSD Survey Respondents

HQS Fleet Support Force (FSF)
HQS Patrol Force (PatFor)
HQS Service Force (ServFor)
HQS Assault Craft Force (ACF)
HQS Naval Air Group (NAG)

HQS Special Warfare Group (SWG) BRP Rajah Humabon (PF 11) BRP Miguel Malvar (PS 19) BRP Magat Salamat (PS 20) BRP Sultan Kudarat (PS 22) BRP Datu Marikudo (PS 23) BRP Cebu (PS 28) BRP Negros Occidental (PS 29) BRP Pangasinan (PS 31) BRP Iloilo (PS 32) BRP Quezon (PS 70) BRP Rizal (PS 74) BRP Emilio Jacinto (PS 35) BRP Apolinario Mabini (PS 36) BRP Artemio Ricarte (PS 37) BRP Zamboanga Del Sur (LT 86) BRP South Cotabato (LT 87) BRP Lanao del Norte (LT 504) BRP Kalinga- Apayao (LT 516) BRP Bacolod City (LC 550) BRP Dagupan City (LC 551) BRP Ang Pangulo (AT 25) BRP Lake Bulusan (AW33) BRP Lake Paoay (AW34) BRP Lake Taal (AF 72) BRP Lake Buhi (AF 78) BRP Mactan (AC 90) BRP Yakal (AD 617) BRP Bagong Silang (PG 104) BRP Heracleo Alano (PG 376) BRP Rafael Pargas (PG 379) BRP Nestor Reinoso (PG 380) BRP Federico Martir (PG 385) BRP Manuel Gomez (PG 388) BRP Condrado Yap (PG 840) BRP Jose Artiaga (PG 844)

The current supply officers completed eighty-two percent of the collected RSD surveys, while individuals formerly assigned as supply officer of their respective units completed the remaining eighteen percent.

D. SURVEY OBJECTIVE AND DESIGN

The significance of this survey to the study is based on the assumption that the experience of these supply officers transacting business with the RSD reflects enough information on the existing issues regarding the services provided by the RSD. Therefore, the objective of the survey was to determine and evaluate the effects of the current RSD operations on the RSD customers and to Fleet readiness.

The survey questionnaire (see Appendix C) was divided into three areas of concern, namely, customer experience (Questions 1-6), customer satisfaction (Questions 7-10), and customer evaluation of RSD and commercial vendors services (Questions 11-14). The questionnaire was designed to further illuminate the issues about outsourcing and depot responsiveness raised in the earlier interview, but this time responses were sought from the RSD customers.

E. SURVEY RESPONSE DATA

The survey questions and associated response data are presented on the following pages.

QUESTIONS ONE AND TWO:

The first and second survey questions were designed to provide background information on the respondent. It could be argued that an organization that uses RSD would have a better understanding of its purpose and operation than one who doesn't use RSD at all or very infrequently. More would be at stake for organizations that frequently use RSD if RSD was to be eliminated, and therefore their informed responses were more relevant to this study.

Have you performed tasks/duties as supply officer?

Do you have any experience transacting business with RSD, NLC during your supply officer billet?

All the forty-one collected survey questionnaires were answered by previous and current supply officers who had have experience transacting business with the RSD.

QUESTION THREE:

The third survey question was designed to determine how frequently the customers are using the RSD.

How often does your unit use RSD?

SURVEY RESPONSES FOR QUESTION THREE WERE:

0 visits quarterly	0%
1-3 visits quarterly	15%
4-6 visits quarterly	25%
Greater than 6 visits quarterly	60%

The majority of respondents (60%) indicated that they visit RSD more than six times per quarter. Only (15%) indicated they visit RSD one to three times a quarter, this is because of the nature of the units' deployment. Since such a high number of the respondents frequently use RSD, the responses would seem to reflect knowledgeable and serious customers. It is also noted that most customers increased their visits to the RSD during the last quarter of the year to consume all of their 72-100 RF allocations.

QUESTION FOUR:

The second survey question identified the types of items the customer was looking for at a RSD.

What are the most common items your unit purchases from RSD?

SURVEY RESPONSES FOR QUESTION FOUR WERE:

Tools/Electrical	85%
Office Supplies	95%
Janitorial Supplies	80%
Clothing	12%
Athletics Supplies	7%
Messing Supplies	25%
Others (vehicular)	25%

Almost all of the respondents (95%) stated they purchased office supplies. Eighty-five percent and eighty percent of the respondents purchased tools/electrical and janitorial supplies respectively. This indicates that the customers use RSD mainly to satisfy their demand requirements for office, tools/electrical and janitorial supplies.

QUESTION FIVE:

One of the main benefits that RSD wants to provide its customers is a convenient location, one that is readily accessible to its customers. If it is not meeting this objective, it is failing to provide a benefit that is of major importance to the customers.

How accessible is the RSD outlet to your unit?

SURVEY RESPONSES FOR QUESTION FIVE WERE:

Less than 1 Kilometer	65%
1-3 Kilometers	30%
3-5 Kilometers	0%
Greater than 5 Kilometers	5%

Sixty-five percent of the respondents indicated that RSD is within one kilometer from their unit. Thirty percent of the respondents indicated that RSD is within one to three kilometers from their unit. Thus, the location should be convenient for the customer. The survey indicates that five percent of the respondents are traveling in excess

of five kilometers to shop at RSD. This is primarily due to the fact that the two ships are permanently stationed outside the Cavite area but still within the Manila area and required to use RSD.

QUESTION SIX:

The purpose of question six was to indicate how often the respondents are purchasing items that do not meet all of their needs because the RSD selection is inadequate. All too often customers will settle on an item, not because it satisfies their needs, but because it is simply the only item available for purchase. An example of this is when a customer requires a paintbrush of size 4 inches and only 3-inch brushes are available at the RSD. Depending on the requirements of the customer, (e.g., perhaps their ship deploys within a day) the customer will inevitably settle for the size 3 inch paintbrush because there is not enough time to purchase the paintbrush they want.

Do you find yourself purchasing material that is not meeting 100% of your expectations due to RSD selection?

SURVEY RESPONSES FOR QUESTION SIX WERE:

Always	9%
Often	27%
Occasionally	46%
Seldom	18%
Never	. 0%

The percentage of "Never" responses (0%) indicates that inadequacy of items on the shelf is taking place at RSD. The inadequate RSD selection, whether not on the shelf or not carried, causes the customers to purchase items that do not fulfill their needs, which lowers customer service levels.

QUESTION SEVEN:

The seventh survey question simply asked if the customer was satisfied with the RSD operation. More specifically, the respondents indicated whether or not they were able to locate the items they want to purchase at RSD.

Are you satisfied with the items availability rate at RSD?

SURVEY RESPONSES FOR QUESTION SEVEN WERE:

Yes 14% No 86%

The high number of "no" responses (86%) indicates that the customers are not able to satisfy their requirements at RSD because they can't find the item on the shelf. If this is the case, the customer either buys a substitute item or returns to their unit without the material. If the customer still requires the item, they must submit a purchase requisition to Philippine Fleet Procurement Office for processing.

QUESTION EIGHT:

This survey question asked how the customer felt about the quality levels at RSD.

Responses indicate the perceptions of the customers and whether or not they believe they are receiving the best available quality and the lowest price.

Does RSD provide the best available quality at the lowest price?

SURVEY RESPONSES FOR QUESTION FIVE WERE:

Yes 50% No 41% Can't determine 9%

The majority of the respondents (50%) favorably indicate that RSD does provide the best available quality at the lowest price. Their comments on the survey indicate that the items available at RSD were cheaper than at commercial vendors, and they attribute this to the government's ability to purchase in large quantities at discounted prices. Fortyone percent of the respondents indicate that either higher quality or lower prices could be found in the local area (e.g., SM Mall, National Bookstore, etc.). Of the forty-one percent, the majority of the respondent's comments indicate that the commercial vendors offer lower prices and brand name quality items.

QUESTION NINE:

The ninth survey question was designed to determine what benefits the customers perceive they are gaining by using a RSD. All 41 respondents answered this question and many of them provided more than one comment.

What benefits do you gain from using RSD?

SURVEY RESPONSES FOR QUESTION NINE ARE LISTED IN TABLE 2:

Table 2 RSD Customer Benefits

Number of	
Responses	Benefits
32	Accessibility and convenience of RSD
6	Less paper work than with "Over-the-Counter" Purchases
7	No benefits identified
2	Cheaper prices
10	Customers are familiar with the RSD process
1	Variety of items
2	Short waiting time to acquire items on order
2	Customer service

Seventy-eight percent of the respondents agree that the main benefit of RSD is its accessibility. This survey question also found that seventeen percent of the respondents did not perceive any benefits associated with RSD.

QUESTION TEN:

Survey question ten provided the researcher with the customer perceived benefits gained by using local vendors. SM Mall is used to give the respondent an example of the warehouse available to them.

What benefit(s) could you gain by using a local vendor as to compare with RSD?

SURVEY RESPONSES FOR QUESTION TEN ARE LISTED IN TABLE 3:

Table 3
Local Vendor Customer Benefits

Number of	
Responses	<u>Benefits</u>
14	Accessibility and convenience
12	Better quality than RSD
10	Cheaper prices than RSD
8	Better selection than RSD
6	Variety of items
4	Short waiting time to acquire items
4	Customer service is better at local vendors
2	No benefits identified
10	Item availability is greater

Seventy-three percent of the customers identified they would receive better selection, quality, and availability by using local vendors such as SM Mall. Thirty-four percent of the respondents perceived accessibility and convenience could be gained by using local vendors. Twenty-four percent of the respondents perceived the local vendors to have cheaper prices than RSD. However, five percent failed to identify any benefits in using local vendors.

QUESTION ELEVEN:

The purpose of survey question eleven was to determine the willingness of the respondents to seek other sources for their consumable requirements. The question

identifies a trade-off between the attractiveness of a lower price item versus the lost benefit associated with the RSD operation. These benefits were already identified and outlined in the previous question.

Are you willing to forego the benefit(s) if you can get the same item at a lower price at a local commercial vendor?

SURVEY RESPONSES FOR QUESTION ELEVEN WERE:

Yes 85%

No 15%

The high number of positive responses (85%) indicates there is a willingness to use local commercial vendors. The responses also indicate the importance the respondents place on lower price vice the benefits of the RSD operation.

QUESTION TWELVE:

Survey question twelve was similar to the previous question in that it determined the willingness of the respondents to use local commercial vendors for their consumable needs. This question tried to determine if the customer would still be willing to forego the RSD benefits and utilize commercial vendors, even if there was no price advantage at RSD.

Are you willing to forego the benefit(s) if you can get the same item at the same price at a local commercial vendor?

SURVEY RESPONSES FOR QUESTION TWELVE WERE:

Yes 45%

No 55%

Based on the "yes" answer in question number eleven, 47% of the respondents who answered "yes" to question eleven changed their answer to "no" for question

number twelve, which reflects the importance the respondents place on price and how it relates to RSD benefits. The 47% of the respondents clearly are not willing to purchase same price items from commercial vendors and lose the RSD benefits they have been accustomed to receiving. On the other hand, forty-five percent of the respondents perceived the benefits of a commercial vendor outweigh the benefits of RSD when the same item at the same price is being compared.

QUESTION THIRTEEN:

The response to survey question thirteen was used to determine if the organizations who use the RSD can still satisfy their mission and readiness with the use of local vendors.

If the RSD was eliminated in your area, could you still carry out your mission with the use of local vendors?

SURVEY RESPONSES FOR QUESTION THIRTEEN WERE:

Yes 98% No 2%

The majority of responses (98%) indicate that if RSD was to be eliminated, the customer could still function and conduct business as usual with the use of local vendors. The commercial vendors can provide all essential items necessary for the organizations to carry out their mission. Those items that are military specific (e.g., AFP Service Record Form, etc.) could still be purchased through the normal requisition process.

QUESTION FOURTEEN:

Survey question fourteen allowed the respondents to provide their own recommendation and suggestions to improve the RSD operation. Approximately ninety-

four percent of the respondents answered this question and provided more than one suggestion.

What suggestion can you offer to improve the RSD operation?

SURVEY RESPONSES FOR QUESTION FOURTEEN ARE LISTED IN TABLE 4:

Table 4
Customer Recommendations

Number of	
Responses	Suggested Improvements
16	No improvements identified
11	Increase material on the shelf (depth)
8	Larger selection (range)
10	Better quality
4	Increase manpower
4	Make customer satisfaction a higher priority
4	Get organized

Twenty-seven percent, 20%, and 24% of the respondents would like improve depth, range, and quality, respectively, at RSD. Yet, thirty-nine percent of the respondents did not suggest any improvements to the RSD operation. This could be attributed to the respondents' unwillingness to take the time to answer the question or they are satisfied with the RSD operation.

F. SUMMATION OF THE SURVEY RESULTS

In summary, the findings are:

• 86% of all the respondents are not satisfied with the item availability rate of the RSD. The customers have indicated that they cannot find the required item on the shelf. This reduces the organization's effectiveness and increases their labor time requirements to purchase these needed items.

- 82% of the respondents always, often, or occasionally purchase items from the RSD that do not meet their requirements because the actual item they need is not on the shelf or not carried at the RSD.
- 78% of the respondents identified that one benefit of RSD is the accessibility of the facility to their organization. However, 85% of the respondents would forego this and other benefits if they could purchase the same item at a lower price at a local vendor. However, a small majority (55%) would be unwilling to sacrifice the benefits provided by RSD if the prices offered by RSD and commercial vendors were the same.
- 98% of all respondents stated that the local vendors could provide their entire consumable item needs in a way that fleet readiness and mission requirements would not suffer.

From the survey results we conclude that the RSD customers are not satisfied with the current RSD operation at Naval Logistic Center. There is a willingness of the respondents to forego the RSD benefits and use commercial vendors for their consumable needs provided that the items are cheaper than the RSD price.

Furthermore, the major comment in question fourteen reinforced the claim of the AFP officials for the need to improve supply depot operations in terms of supply distribution, quality and availability of items on the shelf.

The next chapter will present the main conclusions derived from the analyses performed in the previous chapters. It will also provide some recommendations regarding the effective management of the RSD and the effective way to acquire consumable items for the Philippine Fleet units.

V. SUMMARY, ASSUMPTIONS, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter the researcher responds to the primary research question, "What is the most cost-effective method of delivering the services currently provided by the Ready Supply Depot at the Philippine Fleet?". It is based on the data analysis and responses to the interview and RSD customer survey in the previous chapters. The subsidiary questions identified in Chapter I are also addressed in this chapter.

A. SUMMARY

Chapter I provided the necessary background information on the ever-changing political environment with the focus on more stringent fiscal constraint on DND as well as the Philippine Navy. Chapter I also provided the focus of the research, scope, and organization for this thesis.

Chapter II explained the difference between the consumables, repairable items, and repair parts. It also identified the mission, requirements, and benefits of a RSD operation.

Chapter III provided the database formulation and methodology for this study. More specifically, this data represented the initial purchase price of the consumable item and all labor and non-labor costs of the RSD operation. Additionally Chapter III provided a comparison of the total price of 307 highest selling items inventoried at the RSD to similar items sold by commercial vendors in the Cavite-Manila area.

B. ASSUMPTIONS

In order to arrive at our conclusion, we have to present the following assumptions:

- That the Adjusted RSD Price used in Chapter III reflects total cost of providing sample items via RSD.
- That the relationship between Adjusted RSD Price and Vendor Price is similar for non-sample items.
- That all identified costs (RSD price plus operating costs) will be saved if
 RSD is closed.
- That no new costs would be incurred to provide the military items currently available at RSD through some other procurement system.

C. CONCLUSIONS

Considering the assumptions stated above, our research indicates that the Navy could save government funds by eliminating the RSD. We believe that this could be accomplished while still providing the current level of support to RSD customers. This is also supported by the overwhelming response of 98% of the RSD customers in survey question number thirteen. By eliminating the RSD, the navy could save an annual operating cost of PhP2,482,684.08. The Fleet units will incur an increase cost of PhP704,449.75 if the consumable items are procured from commercial vendors. Therefore, closing the RSD will annually save the government PhP1,778,234.33. The figures are computed using the following steps:

1. Estimate the proportion of all RSD sales represented by the 307 line items analyzed in the sample.

% of sale for = Sales for 307 line items =
$$\frac{15,424,583.10}{20,173,814.40}$$
 = 76.5%

2. Estimate the excess cost to Fleet units of procuring items from commercial vendors vice RSD. This is done by projecting the excess cost found in the sample to the full set of 602 line items procured via RSD.

Annual increase in =
$$538,904.07 \times \frac{100}{76.5} = 704,449.75$$
 items cost to units

3. Compare the operating cost savings from closing the RSD to the increased cost to the Fleet of procuring from commercial vendors.

RSD annual operating cost =
$$2,482,684.08$$

Government Annual Savings

- = RSD annual operating annual increase in items cost savings cost to units
- = 2,482,684.08 704,449.75 =**PhP1,778,234.33**

We also found that prices at local vendors for comparable items were higher, in general, for the sample of 307 line items sold by the RSD. Our data shows that the customers would pay a higher price of PhP538,904.07 annually to purchase the 307 highest selling items at commercial vendors vice at the RSD. This is a significant finding. We had originally thought that RSD items would be more expensive than commercially purchased items. However, in order to quantify the operational cost of the RSD, the researcher uses the "charge back scheme" to come up with the adjusted RSD price. Using this method we found that the government will incur an additional cost of PhP1,312,045.90 in providing the 307 line items via RSD than it would by having the

said items purchased from commercial vendors. Extrapolating to all 602 line items carried by RSD, we conclude that the government can save PhP1,778,234.33 even after allowing for the higher cost of purchasing supplies from the local vendors.

In Chapter II, we discussed funding for the procurement of supplies. We found that the authorized 72-100 RF allocation of PhP20M for the navy was set back in 1976. This amount is no longer reasonable to sustain the current consumable supplies needed by the units, as demand and price of items has increased while the value of money has depreciated (In 1976, \$1 = PhP7 while in 1999, \$1 = PhP43). We also discussed how the release of funds of the units depends solely on the release of allotment advice, which is usually delayed. Since this occurs currently in the procurement process, the procurement of necessary supplies is affected, as indicated by poor range and depth of stock in the RSD. Until these things are acted upon, the RSD cannot satisfy the requirements of the units.

To further support the conclusion, we have determined how customers feel about the RSD operation. Our customer survey showed that RSD customers wanted the selection, quality, and availability that the local vendors offered and RSD did not. More specifically, eighty-six percent were not satisfied with item availability at the RSD. Eighty-five percent were willing to forego the RSD benefits, which are mainly location and reduction of paperwork associated with purchasing material, and use the commercial vendors for their consumable needs, if the items are found to be cheaper outside RSD.

The survey also showed that a small majority (55%) of customers are not willing to forego the benefits of the RSD if the price of the items is the same compared to commercial vendors. Twenty-four percent of the customers perceived that local vendors

price is cheaper than the RSD. But the computation found in Chapter III, showed that RSD price for the comparable 307 line items is cheaper than local vendors. From these observations we can conclude that customers are giving importance to the price difference between the two sources. The customers would want to see RSD stay open provided that the RSD prices are as cheap as local vendors. However, based on the statement given by LT Elchico [Ref. 5], the possible explanation of the concern of customers for price could be attributed to the intention of the units to maximize full utilization of their fund allocation. If the savings incurred by the government in eliminating RSD will be reallocated to each fleet unit, the benefits for the customers of availing local vendors will be realized.

Moreover, the author also agreed with the observations of the AFP officials interviewed in the course of conducting this research. This issue regards the possible benefit of outsourcing AFP product and services in order to reduce the burden of the government of financing too many depots.

D. RECOMMENDATIONS

Base on the research, it is our recommendation that RSD be eliminated and that the customers be allowed to use commercial vendors for their non-military consumable item needs. We also recommend that the Navy ask the government to increase the fund allocation for the Fleet units by reallocating to them a part of the savings incurred in eliminating the RSD. In this sense, the units can be compensated for the additional cost incurred in availing local vendors and at the same time enjoy the benefits as enumerated earlier in the survey results.

Additionally, we suggest that an even greater savings may be obtained if the customers compared prices between other local vendors in addition to the ones contacted in this research. We feel customers could use this competition between commercial vendors to their advantage and save on their consumable expenditures. Fleet readiness would also improve due to the ability of local vendors to provide the selection, quality, and availability that the RSD customers demand yet RSD does not provide.

Furthermore, we recommended to the Navy, particularly NLC, to review the existing logistic policy. This will help the navy change policies that fit the past environment when there were limited commercial vendors, but which are no longer beneficial in the present environment. We also recommend that the navy explore the benefits of employing commercial practices in the naval logistics. Among other things is the possibility of outsourcing or availing commercial vendors to provide non-military consumable needs of the Navy. A process for doing this is described in OMB Circular A-76 of the United States Office of Management and Budget as summarized in Appendix D.

Finally, if RSD is not to be eliminated for reasons beyond the scope of this study, we recommend that the RSD improve its operation by offering the selection, availability, quality, and price their customers desire. One possible recommended solution is the implementation of the AFP Comptroller Letter 88-8 dated October 04, 1988, that will increase availability of ready cash to be used by the RSD, as explained in Chapter II.

The main focus of this study was the Navy RSD and its conclusions are not intended to be applied to other AFP RSD. However, further research is recommended to

see if the Philippine Government, particularly the AFP, can benefit from applying similar analysis to other AFP RSD.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A: RSD CONSUMABLE ITEMS INVENTORY

SALES FOR CY 1999

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A: RSD CONSUMABLE ITEMS INVENTORY SALES FOR CY 1999

ភ	C2	ន	25	CS	92
			RSD	ANNUAL	ANNUAL
STOCK NUMBER	NOMENCLATURE	LIND	PRICE	DEMAND	SALES
CLOTHING					
8405-PN-00-5310	BDA W/ CAP	PR	544.00	9	3,264.00
8440-00-R10-0335	BELT, NYLON BLK	EA	20.00	115	5,750.00
8440-PN-00-4873	BELT, WAIST BLK WEB	EA	24.00	78	1,872.00
8420-00-R10-0127	BRIEF, COTTON WHITE	EA	45.00	135	6,075.00
8315-PN-000-5306	BUCKLE, BRASS W/O LOGO	EA	42.00	15	630.00
8410-PN-000-5845	CAP	EA	280.00	က	840.00
8410-PN-000-5845	CAP	EA	600.00	3.	1,800.00
8440-00-R10-0173	CAP BALL OD	EA	85.00	10	850.00
8450-PN-000-5139	CAP, OVERSEA BLK EP	EA	294.00	20	5,880.00
8450-PN-000-5328	CAP, OVERSEA BLK OFFICER	EA	294.00	10	2,940.00
8305-PN-000-4914	CLOTH, DIRTY WHITE WIDTH 60"	ΥD	90.00	8	720.00
8305-PN-000-4914	CLOTH, DIRTY WHITE WIDTH 60"	YD	120.00	8	960.00
8305-PN-000-4913	CLOTH, NAVY BLK WIDTH 60"	YD	140.00	11	1,540.00
8305-PN-000-4913	CLOTH, NAVY BLK WIDTH 60"	ΥD	190.00	40	7,600.00
8430-00-186-7146	COMBAT BOOTS TROPICAL, CLASS A	PR	1,300.00	49	63,700.00
8415-PN-000-1353	FATIGUE SHORT PANTS ALONS	EA	250.00	12	3,000.00
8405-00-R10-1536	FATIGUE UNIFORM	SE	1,085.00	12	13,020.00
8415-00-R10-0874	HELMET LINER KEVLAR TYPE W/ COVER	EA	350.00	12	4,200.00
8470-00-255-8579	HELMET, STEEL	EA	1,400.00	12	16,800.00
7105-00-R10-1237	MAT CANVASS WHITE OD	EA	485.10	52	25,225.20
8465-46-000-5678	PACK, JUNGLE	EA	750.00	12	00.000,6
8465-46-000-5678	PACK, JUNGLE	EA	750.00	12	00.000,6
8420-PN-000-5323	PANTS, SHORT ORD	EA	120.00	18	2,160.00
8420-PN-000-5323	PANTS, SHORT ORD	EA	150.00	18	2,700.00

8405-00-464-9506	PONCHO RUBBERIZED FOR EP	EA	685.00 48	32,880.00
8465-00-R10-1783	POUCH CANTEEN	EA	180.00 48	8,640.00
8468-00-R10-1783	POUCH CANTEEN	EA	85.00 8	00.089
8465-PN-000-1349	POUCH MEDICAL	EA	120.00 8	00'096
8405-46-000-5090	RAINCOAT, GREEN OD	EA	480.00 10	4,800.00
8405-PN-000-0522	RAINCOAT, W/ HOOD, NAVY BLUE NYLON	EA	336.00 10	3,360.00
8430-PN-000-4378	SHOES, SVC LOW CUT BLK EP	PR	1,000.00 84	84,000.00
8430-PN-000-4378	SHOES, SVC LOW CUT BLK EP	PR	550.00 84	46,200.00
8430-PN-000-3770	SHOES LOWCUT WETLOOK OFFICER	PR	1,275.00 40	51,000.00
8430-PN-000-5837	SHOES, PUMP LEATHER BLK	PR	520.00 20	10,400.00
8455-PN-000-5334	SHOULDER LOOP, CPO BM	PR	156.00 5	780.00
8455-PN-000-5366	SHOULDER LOOP, CPO BU	PR	156.00 5	780.00
8455-PN-000-5346	SHOULDER LOOP, CPO CD	PR	156.00 5	780.00
8455-PN-000-5362	SHOULDER LOOP, CPO CE	PR	156.00 5	780.00
8455-PN-000-5359	SHOULDER LOOP, CPO DC	PR	156.00 5	780.00
8455-PN-000-5350	SHOULDER LOOP, CPO EA	PR	156.00 5	780.00
8455-PN-000-5358	SHOULDER LOOP, CPO EM	PR	156.00 5	780.00
8455-PN-000-5344	SHOULDER LOOP, CPO EN	PR	156.00 5	780.00
8455-PN-000-5365	SHOULDER LOOP, CPO EO	PR	156.00 5	780.00
8455-PN-000-5355	SHOULDER LOOP, CPO ET	PR	156.00 5	780.00
8455-PN-000-5341	SHOULDER LOOP, CPO GM	PR	156.00 5	780.00
8455-PN-000-5360	SHOULDER LOOP, CPO HM	PR	156.00 5	780.00
8455-PN-000-5349	SHOULDER LOOP, CPO JO	PR	156.00 5	1 780.00
8455-PN-000-5345	SHOULDER LOOP, CPO MR	PR	156.00 5	780.00
8455-PN-000-5348	SHOULDER LOOP, CPO MU	PR	156.00 5	780.00
8455-PN-000-5367		PR	156.00 5	780.00
8455-PN-000-5340	SHOULDER LOOP, CPO RD	PR	156.00 5	780.00
8455-PN-000-5342	SHOULDER LOOP, CPO RM	PR	156.00 5	780.00
8455-PN-000-5343		PR	156.00 5	780.00
8455-PN-000-5354		PR	156.00 5	780.00
8455-PN-000-5356	SHOULDER LOOP, CPO YN	PR	156.00 5	780.00

8455-PN-000-5339	SHOULDER LOOP, OFFICER CDR	PR	156.00	13	2,028.00
8455-PN-000-5335	SHOULDER LOOP, OFFICER ENS	PR	156.00	20	7,800.00
8455-PN-000-5338	SHOULDER LOOP, OFFICER LCDR	PR	156.00	24	3,744.00
8455-PN-000-5337	SHOULDER LOOP, OFFICER LT	PR	156.00	45	7,020.00
8405-PN-000-4443	UNIFORM, ATHLETIC BOTAK	PR	499.99	280	139,997.20
			Sub Total		P 609,415.40
ELECTRICAL					
6250-PH-005-4162	BALLAST, FLUO LAMP 20W 115V	EA	55.00	84	4,620.00
6250-PH-001-0820	BALLAST, FLUO LAMP 20W 230V	EA	140.00	84	11,760.00
6250-PH-001-0820	BALLAST, FLUO LAMP 20W 230V	EA	160.00	84	13,440.00
6250-PH-005-4169	BALLAST, FLUO LAMP 40W 220V	EA	69.53	84	5,840.52
6250-PH-005-4169	BALLAST, FLUO LAMP 40W 220V	EA	170.00	84	14,280.00
6135-00-120-1030	BATTERY, SIZE AA DRY CELL	EA	13.50	336	4,536.00
5975-PH-001-0030	BATTERY, SIZE D FLASHLIGHT 1.5V	EA	16.00	336	5,376.00
5975-PH-001-0030	BATTERY, SIZE D FLASHLIGHT 1.5V	EA	14.50	336	4,872.00
6240-00-143-3142	BULB, INCAN 100W 115V	EA	32.00	84	2,688.00
6240-00-143-3142	BULB, INCAN 100W 115V	EA	120.00	84	10,080.00
6240-PH-005-4090	BULB, INCAN 100W 220V	EA	27.00	84	2,268.00
6240-00-635-4475	BULB, INCAN 200W 110-120V	EA	46.31	84	3,890.04
6240-PH-001-5507	BULB, INCAN 200W 220V	EA	83.00	84	6,972.00
6240-PH-005-4056	BULB, INCAN 25W 220V	EA	18.00	84	1,512.00
6240-00-269-0975	BULB, INCAN 50W 110-120V	EA	23.00	84	1,932.00
6240-PH-001-4303	BULB, INCAN 50W 220V	EA	25.00	84	2,100.00
6240-PH-005-4084	BULB, INCAN 60W 110-120V	EA	24.00	84	2,016.00
6240-PN-000-5614	BULB, INCAN ENERGY SAVER SL 2000	EA	395.00	144	56,880.00
6230-PN-001-1137	FLASHLIGHT, 2 BAT (CHROME PLATED)	EA	180.00	78	14,040.00
6230-PN-001-1137	FLASHLIGHT, 2 BAT (CHROME PLATED)	EA	300.00	78	23,400.00
6250-PH-001-0010	FUSE, 30 AMPERES	EA	10.20	20	510.00
5920-PH-001-0981	FUSE, CARTRIDGE 60 AMPERES	EA	26.00	100	2,600.00
6240-PN-000-1487	LAMP, FLUO 20 WATTS	EA	69.50	65	4,517.50
6240-PN-000-2498	LAMP, FLUO 20W COMPLETE	EA	360.00	65	23,400.00

	6240-PN-000-4612	LAMP, FLUO 20W 220V 1 3/32" CIR	EA	110.00	42	4,620.00
	6240-00-617-1746	LAMP, FLUO 40W 220V	EA	98.50	80	7,880.00
	6240-PH-006-2498	LAMP, FLUO 40W 220V COMPLETE	SE	380.00	40	15,200.00
	6240-PH-001-0818	LAMP, FLUO 32W 220V	EA	126.43	40	5,057.20
	5110-00-293-0460	PIPE, CUTTER W/ THREADER	SE	00.866	5	4,990.00
	6250-PH-002-0010	STARTER, FLUO LAMP 20W/230V	EA	13.00	80	1,040.00
	6250-PH-002-0010	STARTER, FLUO LAMP 20W/230V	EA	12.00	80	00.096
	6250-PH-001-0824	STARTER, FLUO LAMP 40W 230V, FS-4	EA	13.00	80	1,040.00
	6250-PH-001-0824	STARTER, FLUO LAMP 40W 230V, FS-4	EA	12.00	80	00.096
	5970-PN-000-1828	TAPE, ELECT BIG, 3/4' X 20YD	R	33.00	117	3,861.00
				Sub Total		P 269,138.26
	FLAGS & PENNANTS					
	8345-PN-000-5454	EVOLUTION FLAG	SE	3,175.00	20	63,500.00
	8345-00-257-3537	FLAG, CAT 1 NAT'L ENSIGN	EA	330.00	9	1,980.00
	8345-PN-257-3537	FLAG, CAT 2 NAT'L ENSIGN	EA	420.00	9	2,520.00
	8345-PN-257-3537	FLAG, CAT 3 NAT'L ENSIGN	EA	330.00	9	1,980.00
	8345-PN-000-5655	FLAG, ALPHABET A-Z CAT 1	SE	7,800.00	12	93,600.00
	8345-PN-000-3959	FLAG, ALPHABET A-Z CAT 2	SE	9,204.00	12	110,448.00
	8345-PN-000-5432	FLAG, COMM PER 1 STAR CAT 1	EA	480.00	4	1,920.00
	8345-PN-000-5446	FLAG, COMM PER 1 STAR CAT 2	EA	375.00	4	1,500.00
	8345-PN-000-5433	FLAG, COMM PER 2 STARS CAT 1	EA	480.00	4	1,920.00
	8345-PN-000-5447	FLAG, COMM PER 2 STARS CAT 2	EA	. 480.00	4	1,920.00
	8345-PN-000-5448	FLAG, COMM PER 3 STARS CAT2	EA	375.00	4	1,500.00
	8345-PN-000-5435	FLAG, COMM PER 4 STARS CAT 1	EA	480.00	4	1,920.00
	8345-PN-000-5449	FLAG, COMM PER 4 STARS CAT 2	EA	480.00	4	1,920.00
	8345-PN-000-4667	FLAG, COMMISSION CAT 1	EA	234.00	3	702.00
	8345-PN-000-5379	FLAG, COMMISSION CAT 2	EA	300.00	3	900.00
•	8345-PN-000-5379	FLAG, COMMISSION CAT 2	EA	234.00	3	702.00
	8345-00-926-1548	FLAG, DIVISION CAT 1	EA	220.80	3	662.40
٠.	8345-PN-000-5380	FLAG, DIVISION CAT 2	EA	354.00	3	1,062.00
	8345-PN-000-4726	FLAG, HOLIDAY	EA	1,140.00	£ .	3,420.00

8345-00-935-0632	FLAG, INT'L #0 CAT 1	EA	220.80	3	662.40
8345-00-935-0632	FLAG, INT'L #0 CAT 1	EA	300.00	3	900.00
8345-PN-000-5382	FLAG, INT'L #0 CAT 2	EA	354.00	3	1,062.00
8345-00-935-0626	FLAG, INT'L #1 CAT 1	EA	220.80	3	662.40
8345-00-935-1838	FLAG, INT'L #2 CAT 1	EA	220.80	3	662.40
8345-00-935-0627	FLAG, INT'L #3 CAT 1	EA	220.80	3	662.40
8345-00-926-6800	FLAG, INT'L #4 CAT 1	EA	220.80	3	662.40
8345-00-935-0628	FLAG, INT'L #5 CAT 1	EA	220.80	3	662.40
8345-PN-000-5386	FLAG, INT'L #5 CAT 2	EA	354.00	3	1,062.00
8345-00-935-0629	FLAG, INT'L #6 CAT 1	EA	220.80	3	662.40
8345-PN-000-5387	FLAG, INT'L #6 CAT 2	EA	354.00	3	1,062.00
8345-00-935-0407	FLAG, INT'L #7 CAT 1	EA	220.80	3	662.40
8345-PN-000-5388	FLAG, INT'L #7 CAT 2	EA	354.00	3	1,062.00
8345-00-935-0630	FLAG, INT'L #8 CAT 1	EA	220.80	3	662.40
8345-00-935-0631	FLAG, INT'L #9 CAT 1	EA	220.80	3	662.40
8345-PN-000-0191	FLAG, JACK PHIL CAT 1	EA	354.00	3	1,062.00
8345-PN-000-0191	FLAG, JACK PHIL CAT 1	EA	350.00	3	1,050.00
8345-PN-000-5391	FLAG, JACK PHIL CAT 2	EA	354.00	3	1,062.00
8345-PN-000-5391	FLAG, JACK PHIL CAT 2	EA	350.00	3	1,050.00
8345-00-935-0464	FLAG, LETTER "A" CAT 1	EA	230.00	3	00.069
8345-00-935-0465	FLAG, LETTER "B" CAT 1	EA	230.00	3	00.069
8345-00-935-0466	FLAG, LETTER "C" CAT 1	EA	230.00	3	00.069
8345-00-935-0468	FLAG, LETTER "E" CAT 1	EA	230.00	3	00.069
8345-00-935-0469	FLAG, LETTER "F" CAT 1	EA	230.00	3	00.069
8345-00-935-0470	FLAG, LETTER "G" CAT 1	EA	230.00	3	00.069
8345-00-935-0471	FLAG, LETTER "H" CAT 1	EA	230.00	3	00.069
8345-00-935-0472	FLAG, LETTER "I" CAT 1	EA	230.00	3	00.069
8345-00-935-0473	FLAG, LETTER "J" CAT 1	EA	230.00	3	00.069
8345-00-935-0474	FLAG, LETTER "K" CAT 1	EA	230.00	3	00.069
8345-00-935-0475	FLAG, LETTER "L" CAT 1	EA	230.00	3	00.069
8345-00-935-0476	FLAG, LETTER "M" CAT 1	EA	230.00	3	00.069

8345-00-935-0479	FLAG, LETTER "P" CAT 1	EA	230.00	3	00.069
8345-00-935-0480	FLAG, LETTER "Q" CAT 1	EA	230.00	3	690.00
8345-00-935-0482	FLAG, LETTER "S" CAT 1	EA	230.00	က	690.00
8345-00-935-0483	FLAG, LETTER "T" CAT 1	EA	230.00	6	690.00
8345-00-935-0485	FLAG, LETTER "V" CAT 1	EA	230.00	3	00.069
8345-00-935-0486	FLAG, LETTER "W" CAT 1	EA	230.00	3	00.069
8345-00-935-0487	FLAG, LETTER "X" CAT 1	EA	230.00	6	00.069
8345-00-935-0488	FLAG, LETTER "Y" CAT 1	EA	230.00	3	00.069
8345-00-935-0489	FLAG, LETTER "Z" CAT 1	EA	230.00	6	00.069
8354-PN-000-5652		SE	3,500.00	8	10,500.00
8345-PN-000-5440	FLAG, PENNANT ABSENTEE 4TH SUBS CAT 1	EA	230.00	က	00.069
8345-PN-000-5437	FLAG, PENNANT ABSENTEE 1ST SUBS CAT 1	EA	230.00	8	00.069
8345-PN-000-5434	FLAG, PENNANT COMM PER 3 STARS CAT 1	EA	354.00	8	1,062.00
8345-PN-000-5441	PENNANT ABSENTEE 1ST SUBS CAT2	EA	354.00	8	1,062.00
8345-00-233-5572	PENNANT, ABSENTEE 2ND SUBS CAT1	EA	260.00	3	780.00
8345-PN-000-5442		EA	354.00	က	1,062.00
8345-PN-000-5439	PENNANT ABSENTEE 3RD SUBS CAT 1	EA	260.00	က	780.00
8345-PN-000-5439	ENNANT ABSENTEE 3RD SUBS CAT	EA	216.00	က	648.00
8345-PN-000-5443	PENNANT ABSENTEE 3RD SUBS CAT 2	EA	354.00	3	1,062.00
8345-PN-000-5444	PENNANT ABSENTEE 4TH SUBS CAT 2	EA	354.00	3	1,062.00
8345-00-935-0413	PENNANT EMERGENCY CAT 1	EA	234.00	က	702.00
8345-PN-000-5418	PENNANT EMERGENCY CAT 2	EA	354.00	9	1,062.00
8345-00-241-4774	PENNANT NUMERICAL #1 CAT 1	EA	350.00	က	1,050.00
8345-PN-000-5419	PENNANT NUMERICAL #1 CAT 2	EA	354.00	က	1,062.00
8345-00-241-4775	PENNANT NUMERICAL #2 CAT 1	EA	350.00	က	1,050.00
8345-PN-000-5420	PENNANT NUMERICAL #2 CAT 2	EA	354.00	က	1,062.00
8345-00-241-4786	PENNANT NUMERICAL #3 CAT 1	EA	350.00	8	1,050.00
8345-PN-000-5421	PENNANT NUMERICAL #3 CAT 2	EA	354.00	8	1,062.00
8345-00-241-4787	PENNANT NUMERICAL #4 CAT 1	EA	350.00	3	1,050.00
8345-PN-000-5422	PENNANT NUMERICAL #4 CAT 2	EA	354.00	3	1,062.00
8345-00-241-4788	PENNANT NUMERICAL #5 CAT 1	EA	350.00	3	1,050.00

OFF. 110 00 7100		5	554.00	77	1,062.00
8345-00-241-4778	PENNANT NUMERICAL #6 CAT 1	EA	350.00	3	1,050.00
8345-PN-000-5424	PENNANT NUMERICAL #6 CAT 2	EA	354.00	က	1,062.00
8345-PN-000-5436	PENNANT NUMERICAL #7 CAT 1	EA	350.00	က	1,050.00
8345-PN-000-5436	PENNANT NUMERICAL #7 CAT 1	EA	350.00	က	1,050.00
8345-PN-000-5425	PENNANT NUMERICAL #7 CAT 2	EA	354.00	က	1,062.00
8345-00-241-4790	PENNANT NUMERICAL #8 CAT 1	EA	350.00	က	1,050.00
8345-PN-000-5426	PENNANT NUMERICAL #8 CAT 2	EA	354.00	ဗ	1,062.00
8345-00-241-4792	PENNANT NUMERICAL #9 CAT 1	EA	350.00	က	1,050.00
8345-PN-00-5427	PENNANT NUMERICAL #9 CAT 2	EA	354.00	က	1,062.00
8345-PN-000-5657	PENNANT NUMERICAL 1-9 CAT 1	SE	3,150.00	က	9,450.00
8345-00-935-0416	PENNANT SPEED CAT 1	EA	260.00	က	780.00
8345-PN-000-5428	PENNANT SPEED CAT 2	EA	354.00	က	1,062.00
8345-PN-000-2847	PENNANT, NUMERICAL # 0 CAT 1	EA	354.00	က	1,062.00
8345-PN-000-2848	PENNANT, NUMERICAL # 0 CAT 2	EA	354.00	က	1,062.00
8345-PN-000-5658	PENNANT, NUMERICAL 1-0 CAT 2	SE	3,186.00	က	9,558.00
8345-PN-000-5653	PENNANT, NUMERICAL 1-0 CAT 2	SE	3,540.00	က	10,620.00
			Sub Total		P 399,376.40
GENERAL					
6830-00-290-4371	ACETYLENE (REFILL)	BT	1,680.00	29	112,560.00
8040-PH-003-5358	ADHESIVE, EPOXY MARINE	SE	455.00	20	22,750.00
8040-PH-003-5358	ADHESIVE, EPOXY MARINE	SE	450.00	20	22,500.00
8040-PH-003-5365	ADHESIVE, RUGBY	CN	384.00	65	24,960.00
8040-PH-003-5365	ADHESIVE, RUGBY	CN	355.00	51	18,105.00
8040-PH-003-5365	ADHESIVE, RUGBY	CN	390.00	35	13,650.00
8020-PH-001-3586	BRUSH, PAINT 1"	EA	18.00	170	3,060.00
8020-PH-001-3156	BRUSH, PAINT 2"	EA	36.00	172	6,192.00
8020-PH-001-4307	BRUSH, PAINT 3"	EA	00.09	165	9,900.00
8020-PH-001-0866	BRUSH, PAINT 4"	EA	72.00	101	7,272.00
7920-PH-005-7199	BRUSH, WIRE	EA	23.00	244	5,612.00
4010-00-171-4099	CABLE CHAIN 1/4" DIA	FT	1,000.00	20	20.000.00

4730-00-965-7503	CLAMP, HOSE	EA	47.50	30	1 425 00
5000-LL-CA1-1461	COVER, TOP EXPLOSION	EA	3,850.00	16	61,600.00
8040-PH-003-5377	GASKET MAKER #1	12	42.50	344	14,620.00
4930-PN-000-3841	GUN, SUCTION OIL 16 OUNCES	EA	754.00	15	11,310.00
5120-00-224-4111	HAMMER, CHIPPING HAND 14"	EA	150.00	212	31,800.00
4720-PN-000-3184	HOSE, LPG	Σ	46.00	78	3,588.00
7340-PN-000-4794	KITCHEN KNIFE	SE	380.00	72	27,360.00
6605-00-240-5717	MANEUVERING BOARD #5090	EA	2,500.00	15	37,500.00
7220-PN-000-4231	MATTING, FLOOR 4MM X 47" X 10 BLK	RL	8,450.00	24	202,800.00
6830-00-169-0804	OXYGEN (REFILL)	ВТ	1,995.00	48	95,760.00
5340-US-000-4149	PADLOCK, 5 PIN TUMBLER YALE (BIG)	EA	338.00	78	26,364.00
8010-PN-000-5651	PAINT, BOOTTOPING BLK (EPOXY)	KT	2,112.00	98	181,632.00
8010-PN-005-0962	PAINT, BOOTTOPING BLK (STEEL)	<u>٦</u>	1,250.00	94	117,500.00
8010-PH-001-3115	PAINT, BRWN CHOCO, ENAMEL, ALKYD	GL	345.00	54	18,630.00
8010-00-286-9083	PAINT, DECK GRAY, ENAMEL ALKYD	PL	1,584.00	94	148,896.00
8010-00-286-9083	PAINT, DECK GRAY, ENAMEL ALKYD	PL	1,650.00	94	155,100.00
8010-00-286-9083	PAINT, DECK GRAY, ENAMEL ALKYD	PL	1,655.00	44	72,820.00
8010-PN-000-5484	PAINT, DECK GRAY, EPOXY	KT	2,666.65	54	143,999.10
8010-PN-000-5567		PL	2,016.00	41	82,656.00
8010-PH-003-3502	PAINT, ENAMEL INT'L ORANGE (STL/WOOD)	GL.	610.00	72	43,920.00
8010-PN-000-5483	PAINT, EPOXY, HAZE GRAY	KT	2,475.00	51	126,225.00
8010-PH-005-0855	PAINT, FLATWALL, WHITE	79	200.00	43	21,500.00
8010-PH-286-7731	PAINT, GRAY AUTOMOTIVE LACQUER	79	00.009	24	14,400.00
8010-PH-286-7731	PAINT, GRAY AUTOMOTIVE LACQUER	79	615.00	26	15,990.00
8010-00-005-0873	PAINT, GREEN DARK, ENAMEL ALKYD	GL	500.00	20	10,000.00
8010-00-285-4872		3 5	390.00	22	8,580.00
8010-PH-005-0975	PAINT, GREEN ROOFMASTER (GALVENIZED)	GL	480.00	20	9,600.00
8018-PH-005-0968	PAINT, HAZE GRAY ENAMEL ALKYD	PL	1,775.00	72	127,800.00
8010-PH-002-3502	PAINT, INT'L RED, ENAMEL ALKYD	GL GL	582.00	12	6,984.00
8010-00-905 2938	PAINT, LATEX WHITE	GL	430.00	20	30,100.00
8010-00-165-8573	PAINT, OXIDE PRIMER, RED	GL	268.00	75	20,100.00

8010-00-165-85/3		3		21,460.00
8010-00-577-4735	PAINT, PASTEL GREEN, ENAMEL ALKYD	GL	480.00 78	37,440.00
8010-PN-000-3920	PAINT, TINTING BLUE	CN	35.00 58	2,030.00
8010-PN-000-3921	PAINT, TINTING GREEN	CN	39.00 69	2,691.00
8010-PN-000-3922	PAINT, TINTING RED	S	43.70 70	3,059.00
8010-PN-000-3923	PAINT, TINTING YELLOW	S	40.00 46	1,840.00
8010-PN-000-5488	PAINT, WHITE, HIGHGRADE (ALUM/STEEL)	잗	3,300.00 67	221,100.00
8010-PH-005-0885	PAINT, YELLOW STRIPPING (STEELWOOD)	Ы	1,200.00 24	28,800.00
8010-PH-005-0885	PAINT, YELLOW STRIPPING (STEELWOOD)	7	1,560.00 32	49,920.00
8010-PH-005-0885	PAINT, YELLOW STRIPPING (STEELWOOD)	P	1,730.00 35	60,550.00
8040-PN-000-4441	PASTE, VULCA SEAL	17	198.50 89	17,666.50
4730-PN-000-2861	REDUCER DOUBLE FRAME 1 1/2"	EA	5,500.00 12	00.000,00
4730-PN-000-2860	REDUCER DOUBLE FRAME 2 1/2"	EA	9,000.00 12	108,000.00
4720-PN-000-2858	REFUELLING HOSE 1 1/2 X 50 FT	EA	45,000.00 6	270,000.00
4220-PN-000-4751	REGULATOR, LPG	EA	320.00 53	16,960.00
8020-00-753-4914	ROLLER, PAINT 7"	EA	84.00 87	7,308.00
8020-00-753-4914	ROLLER, PAINT 7"	EA	85.00 79	6,715.00
8020-US-003-5454	ROLLER, PAINT 9"	EA	95.00 74	7,030.00
4020-00-641-8898	ROPE, NYLON 1" (8.2 KG)	RL	1,435.00 24	34,440.00
4020-00-753-2887	ROPE, NYLON 2" CIR	RL	5,454.70 12	65,456.40
4020-00-753-2887	ROPE, NYLON 2" CIR	R	6,002.50 12	72,030.00
4020-00-752-8878	ROPE, NYLON 3" (82 KG)	RL	14,350.00 24	344,400.00
4020-PN-000-2817	ROPE, NYLON 3/4" CIR (4.9 KG)	RL	910.00 18	16,380.00
4020-PN-000-2817	ROPE, NYLON 3/4" CIR (4.9 KG)	RL	857.50 18	15,435.00
4020-00-752-8880	ROPE, NYLON 5" (222 KG)	RL	34,980.00 12	419,760.00
4020-00-752-8880	ROPE, NYLON 5" (222 KG)	RL	35,298.00 12	423,576.00
4020-00-542-3308	ROPE, NYLON 6" (310 KG) CIR 152"	RL	54,250.00 12	651,000.00
4020-00-752-8881	ROPE, NYLON 7" (422 KG)	RL	76,804.00 12	921,648.00
4020-00-892-4028	ROPE, NYLON 8" (549 KG)	RL	87,291.00 12	1,047,492.00
4020-00-240-2015	ROPE, NYLON CIR 1 1/2"	RL	3,913.00 7	27,391.00
4020-PN-000-4645	ROPE, NYLON STUFF 1/8 DIA (3.0 KG)	RL	286.20 6	1,717.20

21,060.00	390	90.00	E C	AIR FRESHNEK, AEKOSOL CAN SPRAY BROOM, TAMBO	7930-PH-001-010
					JANITORIAL
P 8,445,384.80		Sub Total			
800.00	4	200.00	EA	WRENCH, COMB LONG 5/16" X 6 1/2"	5120-PN-000-3907
408.00	3	136.00	EA	WRENCH, COMB LONG 5/16" X 5 1/2"	5120-PN-000-3908
9,900.00	06	110.00	국		3439-PN-000-5911
1,650.00	9	275.00	GL GL	VARNISH SPAR	8010-PH-001-3155
9,360.00	78	120.00	EA	TRAY PLASTIC, ROLLER PAINT	8020-PN-000-3914
9,282.00	78	119.00	EA	TRAY PLASTIC, ROLLER PAINT	8020-PN-000-3914
491,500.00	100	4,915.00	SE	TOOLS, CHIPPING & SCRAPPING	5130-PN-000-0890
7,997.60	13	615.20	Æ	TOOL, ENTRENCHING	5120-PN-000-0198
6,490.00	59	110.00	GL	THINNER, PAINT	8010-PH-005-0991
7,670.00	59	130.00	ਰ	THINNER, PAINT	8010-PH-005-0991
6,490.00	29	110.00	GL	THINNER, PAINT	8010-PH-005-0991
5,605.00	29	95.00	GL	THINNER, PAINT	8010-PH-005-0991
4,956.00	59	84.00	GL	THINNER, PAINT	8010-PH-005-0991
10,200.00	75	136.00	CN	THINNER, LACQUER	8010-PH-001-3123
177,600.00	4	44,400.00	EA	TENT, CANVASS W.O ACCESSORIES	8340-PN-000-1399
24,200.00	22	1,100.00	EA	SWIVEL 1/23" DIA	4030-PN-000-2752
75,000.00	3	25,000.00	EA	SUCTION HOSE 2 1/2 X 50 FT	4720-PN-000-2856
29,640.00	78	380.00	GF	SOLUTION, METAL PRIMER, PRE WASH	8010-PN-000-4122
14,900.00	100	149.00	LB	SOLDER LEAD METAL	3439-00-163-4347
24,200.00	22	1,100.00	EA	SHACKLE 1/2" DIA	4030-00-542-3180
36,400.00	112	325.00	EA	SCRAPPER	5110-00-240-3094
5,040.00	105	48.00	FT	SAND PAPER NR 120	5350-00-221-0882
4,725.00	105	45.00	FT	SAND PAPER NR 120	5350-00-221-0882
216.00	2	108.00	LT	RUST CONVERTER 1000 ML/LT	8010-PN-000-8080
355,200.00	24	14,800.00	PC	RUBBER FENDER 10 1/2 X 30	2040-PN-000-5472
12,160.00	16	760.00	RL	ROPE POLY SMALL STUFF 1/8" CIR	4020-PN-000-0780
7,380.00	12	615.00	RL	ROPE, POLY CIR 3/4"	4020-PN-000-4983

L_	7930-PH-001-0020	BROOM, TINGTING	EA	14.40	234	3,369.60
	7930-PH-001-0020	BROOM, TINGTING	EA	15.00	234	3,510.00
	7910-PH-000-0131	BRUSH, POLISHER 14"	EA	169.50	78	13,221.00
_	7920-PH-003-6488	BRUSH, SANITARY NYLON BRISTLE	EA	25.00	78	1,950.00
	7920-PH-003-6488	BRUSH, SANITARY NYLON BRISTLE	EA	130.00	78	10,140.00
	7920-PN-000-3875	BUCKET W/ WRINGERS	EA	1,800.00	144	259,200.00
	7240-00-160-0452	BUCKET, FIRE PLASTIC	EA	55.00	144	7,920.00
1_	7930-PH-003-6556	CLEANSER, POWDER 350 GRAMS/CAN	S	39.00	312	12,168.00
1	6850-00-965-2318	CONTACT CLEANER	EA	490.00	144	70,560.00
_	7930-PH-009-0020	DEODORANT CAKE	EA	16.00	1872	29,952.00
	7920-PH-003-6506	DUSTER, HOUSEKEEPING WOOD HANDLE	EA	30.00	144	4,320.00
	7930-PH-009-0010	DUSTPAN, PLASTIC	EA	39.00	250	9,750.00
<u> </u>	5120-00-849-1441	FORCE CUP, (PUMP TOILET)	EA	35.00	78	2,730.00
	6810-PH-001-0004	HYDROCHOLORIC ACID (MURIATIC ACID)	GL	191.50	234	44,811.00
	7930-PH-025-0010	INSECTICIDE	CN	195.00	78	15,210.00
	7330-00-153-9759	LADDLE, ALUMINUM	EA	120.00	72	8,640.00
	7930-US-003-5779	METAL POLISH	CN	70.00	234	16,380.00
<u></u>	7930-US-003-5779	METAL POLISH	S	75.00	117	8,775.00
	7930-US-003-5779	METAL POLISH	S	80.00	111	8,880.00
1	7930-PH-006-0010	MOPHANDLE, GALVANIZED	EA	87.00	144	12,528.00
	7920-PH-001-0354	MOPHEAD HANDLE, WOOD	EA	25.00	78	4,290.00
	7930-PH-007-0020	MOPHEAD, COTTON	EA	43.98	234	10,291.32
	7930-PH-007-0020	MOPHEAD, COTTON	EA	43.98	234	10,291.32
	8540-00-530-3770	PAPER, TOILET 500 SHTS 2 PLY	RL	15.00	2744	41,160.00
	7930-PH-008-0020	RAGS,COTTON	ΚL	00.09	350	21,000.00
	7930-PH-008-0020	RAGS,COTTON	KL	56.40	350	19,740.00
	7930-PH-003-6543	SOAP, POWDER DETTERGENT LAUNDRY	BX	33.00	. 234	7,722.00
	7930-PH-003-6544	SOAP, POWDER INDUSTRIAL	KL	92.00	260	53,200.00
	7930-PH-003-6544	SOAP, POWDER INDUSTRIAL	KL	85.00	120	10,200.00
	8540-PN-000-1347	TISSUE, FACIAL SOFT PERFUMED	ВХ	00.00	156	9,360.00
L	7930-PN-000-4563	TOILET BOWL DISINFECTANT	BT	218.00	936	204,048.00

P 134,387.50		Sub Total	_		
6,250.00	25	250.00	EA	TRAY, MESS STAINLESS 6 COMPARTMENT	7350-PN-000-4611
540.00	50	10.80	EA	TEASPOON, STAINLESS	7340-PH-000-1331
425.00	50	8.50	EA	SPOON, TABLE STAINLESS	7340-00-205-3341
1,200.00	50	24.00	EA	SPOON, FIELDMESS	7340-00-R10-0685
1,425.00	25	57.00	EA	SAUCER, COFFEE W/ PN LOGO	7350-00-253-0594
1,080.00	12	90.00	EA	POUCH CANTEEN	8465-00-R10-1826
00.069	2	138.00	EA	PLATE, OVAL W/ PN LOGO	/350-PN-000-4082
775.00	2	155.00	EA	PLATE, OVAL W/ PN LOGO	/350-PN-000-4082
2,117.50	25	84.70	EA	PLATE, DINNER W/ PN LOGO	/ 350-00-192-1933
2,028.00	39	52.00	EA	PLACEMAT, W/ PN LOGO	7210-PN-000-4126
49,140.00	78	630.00	EA	PAN, FRYING	7330-00-238-3805
1,600.00	25	64.00	EA	MUG, COFFEE W/ PN LOGO	7350-00-559-2377
1,300.00	25	52.00	EA	MUG, COFFEE W/ PN LOGO	/350-00-559-2377
2,250.00	50	45.00	EA	KNIFE FIELDMESS	7340-PN-000-0862
5,300.00	100	53.00	EA	GLASS, DRINKING W/ PN LOGO (SMALL)	7350-PN-000-0092
6,100.00	100	61.00	EA	GLASS, DRINKING W/ PN LOGO (BIG)	7350-00-170-8330
475.00	20	9.50	EA	FORK, TABLE STAINLESS	7340-00-229-9477
425.00	20	8.50	EA	FORK, TABLE STAINLESS	7340-00-229-9477
1,215.00	20	24.30	EA	FORK, FIELDMESS	7340-00-R10-0682
460.00	20	9.20	EA	FORK, FIELDMESS	7340-00-R10-0682
1,200.00	20	24.00	EA	FORK, FIELDMESS	7340-00-R10-0682
8,580.00	156	25.00	EA	CUP, COFFEE W/ PN LOGO	7350-00-375-2477
33,540.00	78	430.00	EA	CASSEROLE (MEDIUM)	7310-PN-000-3938
3,248.00	56	58.00	EA	BOWL, SOUP W/ PN LOGO	7350-00-823-7562
3,024.00	56	54.00	EA	BOWL, SOUP W/ PN LOGO	7350-00-823-7562
					MESSING
P 1,088,005.24		Sub Total			
37,440.00	144	260.00	CN	WAX, FLOOR RED	7930-PH-004-0040
36,000.00	144	250.00	CN	WAX, FLOOR COLORLESS	7930-PH-004-0030
7,488.00	78	96.00	EA	WASTEBASKET, PLASTIC W/ COVER	/930-PN-000-5466

OFFICE					
9330-00-202-4003	ACETATE, PLASTIC SHEET #3	R	652.00	78	20,856.00
9330-00-202-4008	ACETATE, PLASTIC SHEET #6	RL	1,416.00	78	110,448.00
7530-PH-000-0945	BOOK, RECORD 150 PAGES, NON-BLOT	EA	25.00	1560	85,800.00
7530-PH-000-0946	BOOK, RECORD 200 PAGES, NON-BLOT	EA	58.00	936	54,288.00
7530-PH-000-0948	BOOK, RECORD 300 PAGES, NON-BLOT	EA	73.00	936	68,328.00
7510-PH-034-0020	BOOK, RECORD 500 PAGES, NON-BLOT	EA	102:95	936	96,361.20
7530-PH-000-1012	CARD, INDEX 5 X 8	PG	54.00	156	8,424.00
7530-PH-000-1012	CARD, INDEX 5 X 8	PG	26.00	156	8,736.00
7510-PN-000-5138	CARD, STOCK RECORD FORM	EA	2.20	534	1,174.80
7510-PN-000-5138	CARD, STOCK RECORD FORM	EA	5.45	534	2,910.30
9310-PN-000-0783	CARTOLINA, ASSORTED COLOR	EA	5.50	1036	5,698.00
9310-00-232-0373	CARTOLINA, BLUE	EA	5.40	156	842.40
9310-00-223-0370	CARTOLINA, GREEN	EA	5.40	156	842.40
9310-00-223-0371	CARTOLINA, PINK	EA	5.40	156	842.40
9310-PN-000-0049	CARTOLINA, RED	EA	5.40	156	842.40
9310-00-090-2977	CARTOLINA, WHITE	EA	5.40	156	842.40
9310-00-223-0372	CARTOLINA, YELLOW	EA	5.40	156	842.40
7510-PH-000-0055	CLIP, PAPER WIRE (JUMBO)	BX	22.00	624	13,728.00
7510-PH-009-0050	COLUMNAR PAD, 12 COLUMNS	PD	48.00	312	14,976.00
7510-PH-009-0080	COLUMNAR PAD, 18 COLUMNS	PD	00.09	312	18,720.00
7510-PH-000-0058	CORRECTING FLUID, STENCIL	BT	72.50	156	11,310.00
7510-XL-010-0020	CORRECTION FLUID, SNOPAKE	TO	42.90	156	6,692.40
7510-XL-010-0020	CORRECTION FLUID, SNOPAKE	TO	33.00	156	5,148.00
7440-PN-000-3854	COVER, KEYBOARD	EA	110.00	78	8,580.00
7520-XL-002-0020	CUTTER, HEAVY DUTY RETRACTABLE	EA	162.00	78	12,636.00
7510-PN-000-4079	DEVELOPER, REX ROTARY 7315Z	EA	1,500.00	37	55,500.00
7510-PN-000-4079	DEVELOPER, REX ROTARY 7315Z	EA	2,500.00	37	92,500.00
7510-PN-000-4079	DEVELOPER, REX ROTARY 7315Z	EA	2,495.00	37	92,315.00
7510-PN-000-4099	DEVELOPER, REX ROTARY 8225Z	EA	2,495.00	37	92,315.00
7440-PN-000-3807	DISKETE, 3 1/2" DS, HD	BX	215.00	78	16,770.00

7440-PN-000-3807	DISKETE, 3 1/2" DS, HD	BX	210.00	78	16,380.00
7440-PN-000-3806	DISKETE, 5.5 DS HD	æ	300.00	78	23,400.00
7440-PN-000-3805	DISKETE, DOUBLE SIDED, DOUBLE DENSITY	BX	222.00	78	17,316.00
7510-PN-000-4657	DRUM, SOLENIUM, XEROX COPIER 8116Z	EA	12,480.00	12	149,760.00
7530-PN-000-0083	EDP PLASTIC FOLDER LONG (BLUE)	EA	70.00	322	22,540.00
7530-PN-000-4560	ENVELOPE, CATALOG	BX	202.00	936	189,072.00
7510-PH-014-0020	ENVELOPE, DOCUMENTARY BROWN LONG	BX	1,016.00	78	79,248.00
7510-PH-014-0020	ENVELOPE, DOCUMENTARY BROWN LONG	BX	1,016.00	78	79,248.00
7510-PH-014-0010	ENVELOPE, DOCUMENTARY BROWN SHORT	BX	750.00	78	58,500.00
7530-PN-000-0784	ENVELOPE, EXPANDING W/ STRING	EA	9.50	3744	35,568.00
7530-PN-000-4006	ENVELOPE, FILING SHORT PLASTIC	EA	11.00	5360	58,960.00
7530-XL-001-3073	ENVELOPE, MAILING BROWN LONG	BX	220.00	144	31,680.00
7530-PH-000-1154	ENVELOPE, PLAIN MAILING WHITE LONG	BX	220.00	144	31,680.00
7530-PH-000-1154	ENVELOPE, PLAIN MAILING WHITE LONG	BX	225.00	144	32,400.00
7510-XL-000-0084	ERASER, TOUCH & GO TYPERYTER	EA	25.00	468	11,700.00
7510-PH-000-0085	FASTENER, PAPER METAL	BX	32.00	312	9,984.00
7510-PH-017-0010	FASTENER, PAPER PLASTIC	BX	24.00	312	7,488.00
7510-PH-017-0010	FASTENER, PAPER PLASTIC	BX	38.50	312	12,012.00
7510-PN-000-4019	FOLDER, COMPUTER 14 7/8 X 11 7/8	EA	43.00	312	13,416.00
7510-PN-000-4020	FOLDER, FILE COVER	EA	198.80	156	31,012.80
7530-PH-000-1169	FOLDER, FILE LONG WHITE	EA	4.00	2100	8,400.00
7530-PH-000-1169	FOLDER, FILE LONG WHITE	EA	4.50	2100	9,450.00
7530-PH-000-1169	FOLDER, FILE LONG WHITE	EA	4.53	2100	9,513.00
7530-PN-000-3859	FOLDER, FILE LONG W/ PN LOGO	EA	95.00	936	88,920.00
7530-PN-000-3859	FOLDER, FILE LONG W/ PN LOGO	EA	105.00	936	98,280.00
7530-PN-018-1168	FOLDER, FILE SHORT	EA	4.20	936	3,931.20
7530-PN-000-0058	FOLDER, LOOSE LEAF	EA	9.60	936	8,985.60
7510-PH-018-0120	FOLDER, MOROCCO (9 X 12")	EA	7.44	936	6,963.84
7510-PH-018-0120	FOLDER, MOROCCO (9 X 12")	EA	9.00	936	8,424.00
7510-PH-018-0050	FOLDER, MOROCCO LONG (9 X 13 1/2")	EA	10.00	936	9,360.00
7520-PH-018-0020	FOLDER, PRESS BOARD PLAIN	EA	13.75	936	12,870.00

7530-PN-000-3639	FORM. AFP AGO #47 (PTTS)	PD	126.00	78	9,828.00
7530-PN-000-4604	FORM, DISBURSEMENT VOUCHER	PD	125.00	78	9,750.00
7530-PN-000-2343	FORM, INCOMING DISPATCH	DD	45.00	78	3,510.00
7530-PN-000-2343	FORM, INCOMING DISPATCH	PD	00.09	78	4,680.00
7530-PH-000-0596	FORM, INVOICE RECEIPT GENERAL NO. 30	PD	83.00	78	6,474.00
7530-PN-000-0526	FORM, MEMORANDUM RECEIPT	PD	143.00	78	11,154.00
7530-PN-000-0529	FORM, MORNING REPORT AFP AGO #1	PD	00.06	78	7,020.00
7530-PN-000-2344	FORM, OUTGOING DISPATCH	PD	65.00	78	5,070.00
7530-PN-000-3789	FORM, PAYSLIP 3 2/3 X 10 1/2 2 PLY	BX	1,900.00	39	74,100.00
7530-PN-000-3789	FORM, PAYSLIP 3 2/3 X 10 1/2 2 PLY	BX	2,100.00	39	81,900.00
7530-PN-000-5482	FORM, RIV CARBONLESS	DΩ	380.00	78	29,640.00
7530-PH-001-7618	FORM, ROA (ACCTG FORM #102) REV-1992	PD	200.00	78	15,600.00
7530-PN-000-0596	FORM, SERVICE RECORD AFP AGO 24-B	SE	20.00	78	3,900.00
7510-XL-055-0010	GLUE, WHITE	ВТ	13.50	112	1,512.00
7510-PN-000-5906	GRAPHING PAPER	EA	250.00	78	19,500.00
7510-PH-000-0883	ILLUSTRATION BOARD 20 X 30"	EA	27.50	780	21,450.00
7510-XL-019-0010	ILLUSTRATION BOARD 30 X 40" 2 PLY	EA	00.89	780	53,040.00
7510-XL-023-0010	INDEX TAB SELF ADHESSIVE	PK	25.00	312	17,160.00
7510-PN-000-3194	INK, COMPUTER HP51645G BLACK	Ϋ́	1,560.00	24	37,440.00
7510-XL-013-0010	INK, DRAWING BLACK	BT	61.50	78	4,797.00
7510-PN-000-4109	INK, DUPLICATING (RONEO ALCATEL)	ΩL	165.00	78	12,870.00
7510-PH-000-0099	INK, DUPLICATING BLK (GESTENER)	TU	192.00	78	14,976.00
7510-PH-000-0117	INK, STAMP VIOLET	ВТ	20.48	78	1,597.44
7510-PH-000-0117	INK, STAMP VIOLET	ВТ	21.00	78	1,638.00
7530-PN-000-1374	IPMS FORMS	PD	280.00	78	21,840.00
7510-XL-028-0120	MARKER FOR TRANPARENCY	SE	108.15	78	8,435.70
7510-PN-000-4072	MARKER, BLUE REFLECTORIZED	EA	33.50	78	2,613.00
7510-PN-000-3915	MARKER, ORANGE REFLECTORIZED	EA	35.00	78	2,730.00
7510-PN-000-3916	MARKER, GREEN REFLECTORIZED	EA	33.00	78	2,574.00
7530-PN-000-1372	MEMO PAD	PD	40.00	156	6,240.00
7510-PH-056-0010	MEMO, PAD OIL, MULTI-PUR 120 ML/BT	ВТ	22.00	156	3,432.00

7530-PN-000-3823 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0010 7540-PH-031-0020 7540-PN-000-363 7540-PN-000-363 7540-PN-000-363 7540-PN-000-389 7540-PN-000-389 7540-PN-000-389 7540-PN-000-389 7550-PN-000-389 7550-PN-000-389 7540-PN-000-389 7550-PN-000-389 7550-					
		RM	180.00	1440	259,200.00
	IS FORM 11 X 10 5/8 1 PLY	BX	606.00	78	47,268.00
	JS FORM 11 X 10 5/8 2 PLY	XA W	850.00	78	66,300.00
	JS FORM 11 X 10 5/8 3 PLY	BX	747.00	78	58,266.00
	JS FORM 11 X 14 7/8 1 PLY	BX	723.60	78	56,440.80
	IS FORM 11 X 14 7/8 1 PLY	BX	1,249.00	78	97,422.00
	JS FORM 11 X 14 7/8 2 PLY	BX	900.00	78	70,200.00
	JS FORM 11 X 14 7/8 2 PLY	BX	870.00	78	67,860.00
	JS FORM 11 X 14 7/8 3 PLY	BX	798.00	78	62,244.00
	JS FORM 11 X 14 7/8 3 PLY	BX	740.00	78	57,720.00
	JS FORM 11 X 14 7/8 3 PLY	BX	1,398.00	78	109,044.00
	US FORM 11 X 9 1/2 2 PLY	BX	650.00	78	50,700.00
	US FORM 11 X 9 1/2 3 PLY	BX	676.00	78	52,728.00
	US FORM 11 X 9 1/2 1 PLY	BX	336.00	78	26,208.00
	PIER SUBS 20 (A-4)	RM	200.00	78	15,600.00
	IMEO SUBS 20 A-4	RM	155.00	1440	223,200.00
	ON SKIN SUBS 10 A-4	RM	120.00	1440	172,800.00
	ON SKIN SUBS 10 A-5	RM	130.00	1440	187,200.00
PAPE PAFE PAFE PAPER PAPER	ENCIL GESTETNER	BX	540.00	312	168,480.00
PAPE PAF PAPER PAPE	APE PERFORATOR	RL	85.20	156	13,291.20
PAF PAPER, PAPI	APE PERFORATOR	RL	67.00	156	10,452.00
PAF PAPER, PAPI	TELETYPE 2 PLY	RL	285.00	156	44,460.00
PAPER, PAPI	TELETYPE 3 PLY	RL	318.00	156	49,608.00
	RMAL FAX MACHINE	EA	96.00	100	9,600.00
	ER, TRACING	RL	837.00	24	20,088.00
	WHITE RULED PAD	PD	34.65	1248	43,243.20
	YELLOW WRITING	PD	25.00	1248	31,200.00
PARALL	R, FIBERGLASS 36" LONG	PC	1,560.00	156	243,360.00
	r PAPER 8 1/4 X 11 3/4	BX	8.00	1000	8,000.00
	WATER WELL BIG	ВТ	35.50	258	9,159.00

	CONTRACTOR OF THE CONTRACTOR O	٥٥	00 6	516	4,644.00
7530-PN-000-1370	PAT DATA CAND	o la	325.00	516	167,700.00
7530-PN-000-1365	PAY DEDOCTION FORM	E A	39.60	936	37,065.60
7510-PN-000-3931	DEN MADKER, BEN WILLEDOWN	EA	62.50	936	58,500.00
/510-PN-000-595	DEN MARKER RITE WHITEROARD	EA	20.45	936	19,141.20
7510-PN-000-3832	DEN MAIL POINT RIK	EA	27.00	936	25,272.00
7520-PH-000-0412	DEN BALL POINT BLUE	EA	19.80	936	18,532.80
/520-PH-000-0413	DEN BALL BOINT BLUE	EA	27.00	936	25,272.00
7520-PH-000-0413	PEN BALL POINT RED	EA	18.00	936	16,848.00
7540 DNI-000-0410	PEN PENTEL BLK	EA	30.50	936	28,548.00
7540 PM 000 1008	PEN PENTEL RED	EA	19.00	936	17,784.00
7540 DNI 000-1000	PEN. SIGN BLK	EA	47.50	936	44,460.00
7540 YI -038-0010	PEN. SIGN BLUE	EA	41.50	936	38,844.00
7510-XE-039-0010	PEN SIGN BLUE	EA	45.00	936	42,120.00
7510-AL-038-0510	PENCII W/ FRASER MONGOL#2	DZ	80.30	468	37,580.40
7510-FH-033-0010	PENCIL GREASE ASSORTED COLOR	ZQ	172.00	468	80,496.00
7500-000-0050		E	170.00	78	13,260.00
7440 BN 000 4605	PRINTER HEAD COMPUTER (EPSON)	EA	2,794.00	78	217,932.00
7540 00 462-3046	RIBRON ADDING MACHINE NYLON	EA	12.40	144	1,785.60
7540 BN 000 3048	RIBBON COMPUTER PRINTER	Ş	190.00	312	59,280.00
7510-PN-000-5310	RIBRON COMPUTER PRINTER LX-300/800	S	200.00	312	62,400.00
7510-PN-000-3865	RIBBON, CORRECTIBLE CASSETTE IBM	R	220.00	78	17,160.00
7510-PN-000-0584		EA	155.00	312	48,360.00
7510-PH-035-0040	RIBBON, TYPEWRITER MANUAL	SL	17.00	312	5,304.00
7530-PN-000-1371	ROUTINE SLIP SIZE 1/4	DD	40.00	936	37,440.00
675 00-101-1509	RI II FR PARALLEL FOLDING TYPE 18"	EA	529.00	144	76,176.00
7640 BH-036-0020	RULER. PLASTIC 18"	PC	39.00	144	5,616.00
7540 BH 037-0010	SCISSOR. 7"	EA	00.99	78	5,148.00
7510-FH-037-0010	SCISSOR. 7"	EA	00.09	78	4,680.00
0100-100-114-0167	SHARPENER. PENCIL	EA	360.00	39	14,040.00
7520-DH-000-0580	SHARPENER, PENCIL	EA	365.00	39	14,235.00
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					

7510-PH-000-0515	STAMP PAD #1	EA	45.00	78	3,510.00
7510-00-162-6177	STAPLE WIRE REMOVER	EA	10.50	78	819.00
7510-00-162-6177	STAPLE WIRE REMOVER	EA	31.50	78	2,457.00
7520-PH-000-0581	STAPLER MACHINE #444	EA	360.00	78	28,080.00
7510-PN-000-5847	STITCHING WIRE #22	RL	2,850.00	26	74,100.00
510-PN-000-4138	TAPE, MASKING 3"	RL	198.00	156	30,888.00
7510-PH-001-1721	TAPE, 3/4" SCOTCH	RL	18.33	312	5,718.96
7530-PH-000-2590	TAPE, ADDING MACHINE WHITE SUBS #18	RL		936	13,104.00
7530-PH-000-2590	TAPE, ADDING MACHINE WHITE SUBS #18	RL	22.00	936	20,592.00
7510-XL-001-1746	TAPE, MASKING 1"	RL	22.66	156	3,534.96
7510-XL-001-1747	TAPE, MASKING 1"	RL	53.00	156	8,268.00
7510-XL-001-1747	TAPE, MASKING 1"	RL	17.50	156	2,730.00
7510-PN-000-0052	TAPE, MASKING 1"	RL	53.00	156	8,268.00
7510-XL-001-1753	TAPE, MASKING 2"	RL	186.00	156	29,016.00
7510-XL-001-1753	TAPE, MASKING 2"	RL	35.00	156	5,460.00
7510-XL-001-1757	TAPE, MASKING 3"	RL	46.50	156	7,254.00
7510-XL-001-1744	TAPE, MASKING 3/4"	RL	17.00	156	2,652.00
7510-00-079-7906	TAPE, PACKAGING 2" 45 METERS	RL	45.00	156	7,020.00
7510-PN-000-4393	TAPE, SCOTCH 2"	RL	35.00	156	5,460.00
7510-PH-001-1722	TAPE, SCOTCH 3/4"	RL	25.00	156	3,900.00
7510-XL-001-1756	TAPE, SCOTCH 1" TRANSPARENT	RL	20.00	156	3,120.00
7510-PH-000-0392	THUMBTACKS	BX	11.50	156	1,794.00
7510-PN-000-4003	TONER, COPIER MACH REX ROTARY 7315Z	EA	1,900.00	24	45,600.00
7510-PN-000-4108	TONER, COPIER MACH REX ROT 8116Z,UR	TU	1,780.00	24	42,720.00
7510-PN-000-4609	TONER, COPIER MACH REX ROTARY 8225Z	CA	2,600.00	24	62,400.00
7510-PN-000-1202	TONER, COPIER RR 8215Z	TU	2,186.00	24	52,464.00
7510-PN-000-1919	TONER, MITA MODEL DC3060	CA	7,562.50	24	181,500.00
7510-PN-000-3930	TRANSPARENCY FRAME	PG	480.00	78	37,440.00
7510-PN-000-3930	TRANSPARENCY FRAME	PG	1,911.00	78	149,058.00
7510-XL-001-3067	WIRE, STAPLE #10	BX		780	4,095.00
7510-PH-000-0364	WIRE, STAPLE #35	BX	43.20	780	33,696.00

		L	Cub Total	D 7 260 288 A0
VEUICHT AD				
2540-PN-000-2960	AMP WIPER W/ BLADE	EA	380.00 15	5 5,700.00
2920-00-W02-8200	ARMATURE MOTOR	EA	2,400.00	00.009,6
6140-PH-001-3042	BATTERY, STORAGE 2SMF 9 PLATES 12V	EA	2,900.00	8,700.00
6140-PH-001-3043	BATTERY, STORAGE 3SMF 11 PLATES 12V	EA	5,300.00	5 26,500.00
6140-PH-001-3423	BATTERY, STORAGE 4D 21 PLATES 12V	EA	3,760.00 7	26,320.00
6140-PN-000-4129	BATTERY, STORAGE 6SMF 15 PLATES 12V	EA	7,263.00 5	36,315.00
6140-PN-000-3820	BATTERY, STORAGE 6TN 19 PLATES A2 V	EA	8,723.20 7	61,062.40
6140-00-190-9828	BATTERY, STORAGE 8D 31 PLATES 12V	EA	350.00	1,050.00
2540-PN-000-2012	BLADE WIPER	EA	230.00	10 2,300.00
2920-PN-000-3002	CABLE CLUTCH 4K	EA	52.80 78	
5340-PH-001-1551	CLAMP ASSY, BATTERY PT# 5042 M/C	EA	62.00 39	9 2,535.00
5910-PN-000-2335	CONDENCER	EA	190.00	78 14,820.00
2920-JP-000-3283	CONTACT SET DISTRIBUTOR	EA		78   17,940.00
2920-JP-000-3283	CONTACT SET DISTRIBUTOR	EA	15,000.00	4 60,000.00
2815-00-390-2127	CYLINDER LINER ASSY GM6-278A	EA	330.00 1	144 47,520.00
3439-00-465-1914	ELECTROD WELDING	EA	90.00 234	
2910-JP-000-8539	FILTER ASSY FUEL	EA	675.00 1	117 78,975.00
2910-JP-000-8539	FILTER ASSY FUEL	EA	114.00 1	117 13,338.00
5945-PN-000-3008	FLASHER RELAY 12V	EA		64 3,520.00
5945-JP-000-2708	FLASHER UNIT ASSY	EA		64 5,440.00
2910-PN-000-3174	FUEL FILTER GAUGE, TIRE 120 PSI PEN TYPE	EA	400.00	78 31,200.00
4910-PN-000-5326	HIGH TENTION WIRE	EA		24 10,800.00
2920-PN-000-3482	HOSE, RUBBER RADIATOR OUTLET	EA	80.00	42 3,360.00
2930-JP-000-2826	JACK, HYDRAULIC/ 2 TON	EA		78 107,640.00
5120-PN-000-3913	MOTOR WIPER, ASSY	EA		6 6,120.00
2540-JP-005-7561	OIL FILTER M/C	EA	120.00 23	234 28,080.00
2940-JP-000-3120	OVERHAULING GASKET M/C	SE	1,150.00 6	68 78,200.00
2805-JP-000-2932	PISTON ASSY GM16-278A	ВТ		2 59,570.00
2815-00-011-9118	PISTON RING #10000 12A ENGINE M/C	EA	1,050.00	68 71,400.00

2805-JP-000-3045	SEALANT, TIRE CAMEL 16 PL-OZ	EA	780.00	52	40 560 00
8030-PN-000-5325	SEALED BEAM 12V P/N13004 M/C	EA	198.00	52	10.296.00
6220-PH-000-2848	SHOCK ABSORBER ASSY, FRONT	EA	576.00	36	20,736.00
2540-PH-000-3919	SHOCK ABSORBER ASSY, FRONT	EA	450.00	36	16,200.00
2540-PH-000-3919	SHOCK ABSORBER ASSY, REAR	EA	576.00	36	20,736,00
2540-PH-000-3918	SHOCK ABSORBER ASSY, REAR	EA	490.00	36	17,640.00
2540-PH-000-3918	SHOCH ABSORVER REAR	EA	1,095.00	36	39,420.00
2920-JP-000-3325	SPARK PLUG 14 X 19	EA	90.00	560	50,400.00
2920-JP-000-3325	SPARK PLUG 14 X 20	EA	98.00	560	54,880.00
2920-PN-000-2961	SPARK PLUG LONG TIP	EA	00.06	560	50,400.00
2920-PN-000-2961	SPARK PLUG LONG TIP	EA	145.00	560	81,200.00
2530-US-001-1325	TIE ROD END ASSY LH	SE	630.00	78	49,140.00
2610-00-050-9840	TIRE, 600 X 9, 10PLY W/ INTERIOR	EA	3,192.00	24	76,608.00
2610-00-204-3017	TIRE, 700 X 12, 12PLY W/ INTERIOR	EA	4,920.00	24	118,080.00
2610-PN-000-3188	TIRE, 750 X 14, 8PLY	E	3,200.00	12	38,400.00
2610-PN-000-3188	TIRE, 750 X 14, 8PLY	EA	3,100.00	12	37,200.00
2610-PN-000-3188	TIRE, 750 X 14, 8PLY	EA	3,145.00	12	37,740.00
2610-PH-001-9151	TIRE, EXT 700 X 15 8 PLY	EA	3,080.00	12	36,960.00
2610-PN-000-3589	TIRE, EXT 6.5 X 13	EA	1,950.00	12	23,400.00
2610-PH-000-4138	TIRE, INT 600 X 16	EA	252.00	12	3,024.00
2610-PH-001-3695	TIRE, INT 700 X 16	EA	264.00	12	3,168.00
2610-PN-000-3916	TIRE, INT 175 X 13	EA	365.00	12	4,380.00
2610-PN-0003189	TIRE, INT 700 X 15 M151	EA	308.00	12	3,696.00
2610-PH-001-5693	TIRE, INT 900 X 20	EA	504.00	12	6,048.00
2610-PH-001-5693	TIRE, INT 900 X 20	EA	577.00	12	6,924.00
2610-PH-001-3648	TIRE, PNEU 165 X 13 4 PLY	EA	2,321.55	12	27,858.60
2610-PH-001-5653	TIRE, PNEU 175 X 13 4 PLY	EA	2,185.00	12	26,220.00
2610-PN-000-5561	TIRE, PNEU 185 X 13 4 PLY	EA	2,310.00	12	27,720.00
2610-PN-000-5561	TIRE, PNEU 185 X 13 4 PLY	EA	2,295.00	12	27,540.00
2610-PH-001-8789	TIRE, PNEU 185/70 X 14 4 PLY	EA	2,550.00	12	30,600.00

P 1.967.818.40		Sub Total			
19,980.00	12	1,665.00	EA	WIPER MOTOR ASSY 24 V PT# 11644874	2540-00-176-9464
14,040.00	36	390.00	EA	VOLTAGE REG ASSY 12V	2920-JP-000-3340
21,600.00	24	900.00	SE	V-BELT FOR FAN AND GENERATOR	3030-JP-000-3432
81,840.00	12	6,820.00	EA	TIRE, PNEU 900 X 20 14 PLY	2610-XL-001-9098

Source: Developed by the Researcher

P 20,173,814.40

Annual Total Sales

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B: SELECTED RSD CONSUMABLE LINE ITEMS

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX B: SELECTED RSD CONSUMABLE LINE ITEMS

C12	GOV"T	cost/(savings)	(28.75)	(9:36)	1,336.50	(5,096.00)	(2,520.00)	(1,386.00)	3,670.00	(312.00)	646.80	940.80	817.67	317.52	376.32	705.60	158.76	272.30	211.68
C11	PF units	cost/(savings)	(718.75)	(234.00)	607.50	(12,740.00)	(12,600.00)	(6,930.00)	(2,450.00)	(1,560.00)	(462.00)	(672.00)	(584.05)	(226.80)	(268.80)	(504.00)	(113.40)	(194.50)	(151.20)
C10	ANNU	ND	115	78	135	49	84	84	40	20	168	84	168	336	336	84	84	8	168
63	DIFFERE	(C5-C7)	(0.25)	(0.12)	9.90	(104.00)	(30.00)	(16.50)	91.75	(15.60)	3.85	11.20	4.87	0.95	1.12	8.40	1.89	3.24	1.26
83	DIFFERE	(C4-C7)	(6.25)	(3.00)	4.50	(260.00)	(150.00)	(82.50)	(61.25)	(78.00)	(2.75)	(8.00)	(3.48)	(0.68)	(0.80)	(6.00)	(1.35)	(2.32)	(0.90)
C7	VENDOR	PRICE	56.25	27.00	40.50	1,560.00	1,150.00	632.50	1,336.25	598.00	57.75	168.00	73.01	14.18	16.80	126.00	28.35	48.63	18.90
93	ш	RSD PRICE	56.00	26.88	50.40	1,456.00	1,120.00	616.00	1,428.00	582.40	61.60	179.20	77.87	15.12	17.92	134.40	30.24	51.87	20.16
CS	RSD	COST	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
C4	RSD	PRICE	50.00	24.00	45.00	1,300.00	1,000.00	550.00	1,275.00	520.00	55.00	160.00	69.53	13.50	16.00	120.00	27.00	46.31	18.00
ဌ		Ī-	EA	E	EA	PR	PR	PR	PR	PR	EA	EA	EA	EA	EA	E	A	ā	型
C2		NOMENCLATURE	BELT, NYLON BLK	BELT, WAIST BLK WEB	BRIEF, COTTON WHITE	COMBAT BOOTS TROPICAL, CLASS A	SHOES, SVC LOW CUT BLK EP	SHOES, SVC LOW CUT BLK EP	SHOES LOWCUT WETLOOK OFFICER	SHOES. PUMP LEATHER BLK	BALLAST, FLUO LAMP 20W 115V	BALLAST, FLUO LAMP 20W 230V	BALLAST, FLUO LAMP 40W 220V	BATTERY, SIZE AA DRY CELL	BATTERY, SIZE D FLASHLIGHT 1.5V	BULB, INCAN 100W 115V		BULB, INCAN 200W 110-120V	BULB, INCAN 25W 220V
5	5	STOCK	8440-00-R10- 0335	8440-PN-00- 4873	8420-00-R10- 0127	8430-00-186- 7146	8430-PN-000- 4378	8430-PN-000- 4378	8430-PN-000- 3770	8430-PN-000-	6250-PH-005- 4162	6250-PH-001- 0820	6250-PH-005- 4169	6135-00-120- 1030	5975-PH-001- 0030	6240-00-143- 3142	6240-PH-005- 4090	6240-00-635- 4475	6240-PH-005- 4056

6240-00-269- 0975	BULB, INCAN 50W 110-120V	₹	23.00	0.12	25.76	24.15	(1.15)	1.61	84	(96.60)	135.24
6240-PH-001- 4303	BULB, INCAN 50W 220V	Ą	25.00	0.12	28.00	26.25	(1.25)	1.75	84	(105.00)	147.00
6240-PH-005- 4084	BULB, INCAN 60W 110-120V	ā	24.00	0.12	26.88	25.20	(1.20)	1.68	84	(100.80)	141.12
6240-PN-000- 5614	BULB, INCAN ENERGY SAVER SL 2000	<b>a</b>	395.00	0.12	442.40	414.75	(19.75)	27.65	144	(2,844.00)	3,981.60
6230-PN-001- 1137	FLASHLIGHT,2 BAT (CHROME PLATED)	ā	180.00	0.12	201.60	189.00	(9.00)	12.60	78	(702.00)	982.80
6250-PH-001- 0010	FUSE, 30 AMPERES	ā	10.20	0.12	11.42	10.71	(0.51)	0.71	20	(25.50)	35.70
5920-PH-001- 0981	FUSE, CARTRIDGE 60 AMPERES	Æ	26.00	0.12	29.12	27.30	(1.30)	1.82	100	(130.00)	182.00
6240-PN-000- 1487	LAMP, FLUO 20 WATTS	EA	69.50	0.12	77.84	72.98	(3.47)	4.87	65	(225.88)	316.23
6240-PN-000- 2498	LAMP, FLUO 20W COMPLETE	EA	360.00	0.12	403.20	378.00	(18.00)	25.20	99	(1,170.00)	1,638.00
6240-00-617- 1746	LAMP, FLUO 40W 220V	EA	98.50	0.12	110.32	103.43	(4.93)	6.90	90	(394.00)	551.60
6240-PH-006- 2498	LAMP, FLUO 40W 220V COMPLETE	SE	380.00	0.12	425.60	399.00	(19.00)	26.60	40	(760.00)	1,064.00
6240-PH-001- 0818	LAMP, FLUO 32W 220V	EA	126.43	0.12	141.60	132.75	(6.32)	8.85	40	(252.86)	354.00
6250-PH-002- 0010	STARTER, FLUO LAMP 20W/230V	A	13.00	0.12	14.56	13.65	(0.65)	0.91	80	(52.00)	72.80
6250-PH-001- 0824	STARTER, FLUO LAMP 40W 230V, FS-4	EA	13.00	0.12	14.56	13.65	(0.65)	0.91	80	(52.00)	72.80
5970-PN-000- 1828	TAPE, ELECT BIG, 3/4' X 20YD	밁	33.00	0.12	36.96	34.65	(1.65)	2.31	117	(193.05)	270.27
6830-00-290- 4371	ACETYLENE (REFILL)	ВТ	1,680.00	0.12	1,881.60	1,764.00	(84.00)	117.60	29	(5,628.00)	7,879.20
8040-PH-003- 5358	ADHESIVE, EPOXY MARINE	SE	455.00	0.12	509.60	477.75	(22.75)	31.85	50	(1,137.50)	1,592.50
8040-PH-003- 5365	ADHESIVE, RUGBY	S	384.00	0.12	430.08	390.00	(00.9)	40.08	65	(390.00)	2,605.20
8020-PH-001- 3586	BRUSH, PAINT 1"	EA	18.00	0.12	20.16	18.90	(06:0)	1.26	170	(153.00)	214.20
8020-PH-001- 3156	BRUSH, PAINT 2"	EA	36.00	0.12	40.32	37.80	(1.80)	2.52	172	(309.60)	433.44
8020-PH-001- 4307	BRUSH, PAINT 3"	EA	60.00	0.12	67.20	63.00	(3.00)	4.20	165	(495.00)	693.00
8020-PH-001- 0866	BRUSH, PAINT 4"	Ę	72.00	0.12	80.64	75.60	(3.60)	5.04	101	(363.60)	509.04

392.84	1,400.00	1,023.40	2,226.00	251.16	1,915.20	6,703.20	1,845.48	12,714.24	8,225.00	1,304.10	) 22,176.00	10,079.94	5,785.92	3,074.40	8,835.75	1,505.00	1,008.00	700.00	600.60	672.00	
(280.60)	(1,000.00)	(731.00)	(1,590.00)	(179.40)	(1,368.00)	(4,788.00)	(1,318.20)	(9,081.60)	(5,875.00)	(931.50)	(15,840.00)	(7,199.96)	(4,132.80)	(2,196.00)	(6,311.25)	(1,075.00)	(720.00)	(500.00)	(429.00)	(480.00)	
244	20	344	212	78	72	48	78	86	94	54	200	54	41	72	51	43	24	20	22	20	
1.61	70.00	2.98	10.50	3.22	26.60	139.65	23.66	147.84	87.50	24.15	110.88	186.67	141.12	42.70	173.25	35.00	42.00	35.00	27.30	33.60	
(1.15)	(50.00)	(2.13)	(7.50)	(2.30)	(19.00)	(99.75)	(16.90)	(105.60)	(62.50)	(17.25)	(79.20)	(133.33)	(100.80)	(30.50)	(123.75)	(25.00)	(30.00)	(25.00)	(19.50)	(24.00)	
24.15	1,050.00	44.63	157.50	48.30	399.00	2,094.75	354.90	2,217.60	1,312.50	362.25	1,663.20	2,799.98	2,116.80	640.50	2,598.75	525.00	630.00	525.00	409.50	504.00	
25.76	1,120.00	47.60	168.00	51.52	425.60	2,234.40	378.56	2,365.44	1,400.00	386.40	1,774.08	2,986.65	2,257.92	683.20	2,772.00	560.00	672.00	560.00	436.80	537.60	
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
23.00	1,000.00	42.50	150.00	46.00	380.00	1,995.00	338.00	2,112.00	1,250.00	345.00	1,584.00	2,666.65	2,016.00	610.00	2,475.00	500.00	600.00	500.00	390.00	480.00	
EA	Ħ	5	Æ	Σ	SE	BT	ā	호	곱	덩	7	호	김	ಠ	ΚΤ	GL	ಕ	ر 9	g G	ਰ	
BRUSH, WIRE	CABLE CHAIN 1/4" DIA	GASKET MAKER #1	HAMMER, CHIPPING HAND 14"	HOSE, LPG	KITCHEN KNIFE	OXYGEN (REFILL)	PADLOCK, 5 PIN TUMBLER YALE (BIG)	PAINT, BOOTTOPING BLK (EPOXY)	PAINT, BOOTTOPING BLK (STEEL)	PAINT, BRWN CHOCO, ENAMEL, ALKYD	PAINT, DECK GRAY, ENAMEL ALKYD	PAINT, DECK GRAY, EPOXY	PAINT, DEEP BLUE	PAINT, ENML INTL ORANGE (STL/WOOD)	PAINT, EPOXY, HAZE GRAY	PAINT, FLATWALL, WHITE	PAINT, GRAY AUTOMOTIVE LACQUER	PAINT, GREEN DARK, ENAMEL ALKYD	PAINT, GREEN STRIPPING (STEEL)	PAINT, GREEN RFMASTER (GLVNZD)	PAINT HAZE GRAY ENAMEL
7920-PH-005- 7199	4010-00-171-	8040-PH-003- 5377	5120-00-224-	4720-PN-000- 3184	7340-PN-000- 4794	6830-00-169- 0804	5340-US-000- 4149	8010-PN-000- 5651	8010-PN-005- 0962	8010-PH-001- 3115	8010-00-286-	8010-PN-000- 5484	8010-PN-000- 5567	8010-PH-003- 3502	8010-PN-000- 5483	8010-PH-005- 0855	8010-PH-286- 7731	8010-00-005-	8010-00-285- 4872	8010-PH-005- 0975	8018-PH-005-

8010-PH-002- 3502	PAINT, INT'L RED, ENAMEL ALKYD	ਰ	582.00	0.12	651.84	611.10	(29.10)	40.74	12	(349.20)	488.88
8010-00-900- 2938	PAINT, LATEX WHITE	હ	430.00	0.12	481.60	441.50	(11.50)	40.10	70	(805.00)	2,807.00
8010-00-165- 8573	PAINT, OXIDE PRIMER, RED	Б	268.00	0.12	300.16	281.40	(13.40)	18.76	149	(1,996.60)	2,795.24
8010-00-577- 4735	PAINT, PASTEL GREEN, ENAMEL ALKYD	GL	480.00	0.12	537.60	504.00	(24.00)	33.60	78	(1,872.00)	2,620.80
8010-PN-000- 3920	PAINT, TINTING BLUE	CN	35.00	0.12	39.20	36.75	(1.75)	2.45	58	(101.50)	142.10
8010-PN-000- 3921	PAINT, TINTING GREEN	S	39.00	0.12	43.68	40.95	(1.95)	2.73	69	(134.55)	188.37
8010-PN-000- 3922	PAINT, TINTING RED	CN	43.70	0.12	48.94	45.89	(2.19)	3.06	70	(152.95)	214.13
8010-PN-000- 3923	PAINT, TINTING YELLOW	S	40.00	0.12	44.80	42.00	(2.00)	2.80	46	(92.00)	128.80
8010-PN-000- 5488	PAINT, WHITE, HIGHGRD (ALUM/STEEL)	¥	3,300.00	0.12	3,696.00	3,465.00	(165.00)	231.00	29	(11,055.00)	15,477.00
8010-PH-005- 0885	PAINT, YELLOW STRP (STEELWOOD)	Я	1,200.00	0.12	1,344.00	1,260.00	(60.00)	84.00	91	(5,460.00)	7,644.00
8040-PN-000- 4441	PASTE, VULCA SEAL	5	198.50	0.12	222.32	208.43	(9.93)	13.90	89	(883.33)	1,236.66
4730-PN-000- 2861	REDUCER DOUBLE FRAME 1 1/2"	EA	5,500.00	0.12	6,160.00	5,675.00	(175.00)	485.00	12	(2,100.00)	5,820.00
4730-PN-000- 2860	REDUCER DOUBLE FRAME 2 1/2"	EA	9,000.00	0.12	10,080.00	9,050.00	(50.00)	1,030.00	12	(00.009)	12,360.00
4220-PN-000- 4751	REGULATOR, LPG	EA	320.00	0.12	358.40	336.00	(16.00)	22.40	53	(848.00)	1,187.20
8020-00-753- 4914	ROLLER, PAINT 7"	EA	84.00	0.12	94.08	88.20	(4.20)	5.88	166	(697.20)	976.08
8020-US-003- 5454	ROLLER, PAINT 9"	EA	95.00	0.12	106.40	99.75	(4.75)	6.65	74	(351.50)	492.10
4020-00-641- 8898	ROPE, NYLON 1" (8.2 KG)	R	1,435.00	0.12	1,607.20	1,506.75	(71.75)	100.45	24	(1,722.00)	2,410.80
4020-00-753- 2887	ROPE, NYLON 2" CIR	R	5,454.70	0.12	6,109.26	5,727.44	(272.74)	381.83	24	(6,545.64)	9,163.90
4020-00-752- 8878	ROPE, NYLON 3" (82 KG)	RL	14,350.00	0.12	16,072.00	15,067.50	(717.50)	1,004.50	24	(17,220.00)	24,108.00
4020-PN-000- 2817	ROPE, NYLON 3/4" CIR (4.9 KG)	RL	910.00	0.12	1,019.20	955.50	(45.50)	63.70	36	(1,638.00)	2,293.20
4020-00-752- 8880	ROPE, NYLON 5" (222 KG)	占	34,980.00	0.12	39,177.60	36,729.00	39,177.60 36,729.00 (1,749.00)	2,448.60	12	(20,988.00)	29,383.20
4020-00-752- 8880	ROPE, NYLON 5" (222 KG)	R	35,298.00	0.12	39,533.76	37,062.90	39,533.76 37,062.90 (1,764.90)	2,470.86	12	(21,178.80)	29,650.32

53,970.00	84,915.36	98,524.44	1,917.37	120.20	516.60	851.20	661.50	2,548.00	1,694.00	1,043.00	2,074.80	1,694.00	714.00	1,046.64	559.83	34,405.00	1,299.48	115.50	693.00	28.56	56.00
(24,150.00)	(25,682.40)	(27,174.60)	(1,369.55)	(85.86)	(369.00)	(608.00)	(472.50)	(1,820.00)	(1,210.00)	(745.00)	(1,482.00)	(1,210.00)	(510.00)	(747.60)	(399.88)	(24,575.00)	(928.20)	(82.50)	(495.00)	(20.40)	(40.00)
12	12	12	~	9	12	16	210	112	22	100	78	22	75	178	13	100	156	9	90	8	4
4,497.50	7,076.28	8,210.37	273.91	20.03	43.05	53.20	3.15	22.75	77.00	10.43	26.60	77.00	9.52	5.88	43.06	344.05	8.33	19.25	7.70	9.52	14.00
2,012.50)	2,140.20)	2,264.55)	(195.65)	(14.31)	(30.75)	(38.00)	(2.25)	(16.25)	(55.00)	(7.45)	(19.00)	(55.00)	(6.80)	(4.20)	(30.76)	(245.75)	(5.95)	(13.75)	(5.50)	(6.80)	(10.00)
56,262.50 (	78,944.20	89,555.55 (2,264.55)	4,108.65	300.51	645.75	798.00	47.25	341.25	1,155.00	156.45	399.00	1,155.00	142.80	88.20	645.96	5,160.75	124.95	288.75	115.50	142.80	210.00
60,760.00 56,262.50 (2,012.50)	86,020.48 78,944.20 (2,140.20)	97,765.92	4,382.56	320.54	688.80	851.20	50.40	364.00	1,232.00	166.88	425.60	1,232.00	152.32	94.08	689.02	5,504.80	133.28	308.00	123.20	152.32	224.00
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
54,250.00	76,804.00	87,291.00	3,913.00	286.20	615.00	760.00	45.00	325.00	1,100.00	149.00	380.00	1,100.00	136.00	84.00	615.20	4,915.00	119.00	275.00	110.00	136.00	200.00
띪	R	RL	띪	RL	吊	R	ㅂ	EA	EA	EB	GL	Æ	S	G.	Æ	SE	. EA	GL	국	≦	
ROPE, NYLON 6" (310 KG) CIR 152"	ROPE, NYLON 7" (422 KG)	ROPE, NYLON 8" (549 KG)	ROPE, NYLON CIR 1 1/2"	ROPE, NYLON STUFF 1/8 DIA (3.0 KG)	ROPE, POLY CIR 3/4"	ROPE POLY SMALL STUFF 1/8" CIR	SAND PAPER NR 120	SCRAPPER	SHACKLE 1/2" DIA	SOLDER LEAD METAL	SOLUTION, METAL PRIMER, PRE WASH		F	THINNER, PAINT	TOOL, ENTRENCHING	TOOLS, CHIPPING & SCRAPPING	TRAY PLASTIC, ROLLER PAINT	VARNISH SPAR	WELDING ROD 1/8	WRENCH, COMB LONG 5/16" X 5 1/2"	WRENCH, COMB LONG 5/16" X 6 1/2"
4020-00-542-	4020-00-752-	4020-00-892-	4020-00-240-	4020-PN-000-	4020-PN-000-	4020-PN-000- 0780	5350-00-221-	5110-00-240-	4030-00-542-	3439-00-163-	8010-PN-000-	4030-PN-000-	8010-PH-001- 3123	8010-PH-005- 0991	5120-PN-000- 0198	5130-PN-000- 0890	8020-PN-000-	8010-PH-001- 3155	3439-PN-000-	5120-PN-000-	5120-PN-000- 3907

6840-PH-005- 2130	AIR FRESHNER, AEROSOL CAN	3	130.00	0.12	145.60	143.00	(13.00)	2.60	390	(5.070.00)	1.014.00
7930-PH-001- 0010	BROOM, TAMBO	Æ	90.00	0.12	100.80	99.00	(9.00)	1.80		(2,106.00)	421.20
7930-PH-001- 0020	BROOM, TINGTING	Ą	14.40	0.12	16.13	15.84	(1.44)	0.29	234	(336.96)	62.39
7910-PH-000- 0131		গ্ৰ	169.50	0.12	189.84	167.13	2.37	22.71	78	185.09	1,771.61
7920-PH-003- 6488	8	ā	25.00	0.12	28.00	24.63	0.38	3.38	156	58.50	526.50
7920-PN-000- 3875		a	180.00	0.12	201.60	201.60	(21.60)	•	144	(3,110.40)	•
7240-00-160- 0452	BUCKET, FIRE PLASTIC	গ্ৰ	55.00	0.12	61.60	60.50	(5.50)	1.10	144	(792.00)	158.40
7930-PH-003- 6556	CLEANSER, POWDER 350 GRAMS/CAN	S	39.00	0.12	43.68	42.90	(3.90)	0.78	312	(1,216.80)	243.36
6850-00-965- 2318	CONTACT CLEANER	EA	490.00	0.12	548.80	539.00	(49.00)	9.80	144	(7,056.00)	1,411.20
7930-PH-009- 0020	DEODORANT CA	EA	16.00	0.12	17.92	17.60	(1.60)	0.32	1872	(2,995.20)	599.04
7920-PH-003- 6506	DUSTER, HSEKEEPING WOOD HANDLE	EA	30.00	0.12	33.60	33.00	(3.00)	09.0	144	(432.00)	86.40
7930-PH-009- 0010	DUSTPAN, PLASTIC	EA	39.00	0.12	43.68	42.90	(3.90)	0.78	250	(975.00)	195.00
5120-00-849- 1441	FORCE CUP, (PUMP TOILET)	E	35.00	0.12	39.20	33.25	1.75	5.95	78	136.50	464.10
6810-PH-001- 0004		G	191.50	0.12	214.48	210.65	(19.15)	3.83	234	(4,481.10)	896.22
7930-PH-025- 0010	INSECTICIDE	S	195.00	0.12	218.40	185.25	9.75	33.15	78	760.50	2,585.70
7330-00-153- 9759	LADDLE, ALUMINUM	EA	120.00	0.12	134.40	114.00	9.00	20.40	72	432.00	1,468.80
7930-US-003- 5779	METAL POLISH	S	70.00	0.12	78.40	77.00	(7.00)	1.40	234	(1.638.00)	327.60
7930-PH-006- 0010	MOPHANDLE, GALVANIZED	Æ	87.00	0.12	97.44	95.70	(8.70)	1.74	144	(1,252.80)	250.56
7920-PH-001- 0354	MOPHEAD HANDLE, WOOD	₹	55.00	0.12	61.60	52.25	2.75	9.35	78	214.50	729.30
7930-PH-007- 0020	MOPHEAD, COTTON	E	43.98	0.12	49.26	48.38	(4.40)	0.88	234	(1,029.13)	205.83
8540-00-530- 3770	PAPER, TOILET 500 SHTS 2 PLY	RL	15.00	0.12	16.80	17.25	(2.25)	(0.45)	2744	(6,174.00)	(1,234.80)
7930-PH-008- 0020	RAGS, COTTON	K	60.00	0.12	67.20	66.00	(00.9)	1.20	350	(2,100.00)	420.00

RAGS,COTTON	귛	56.40	0.12	63.17	62.04	(5.64)	1.13	350	(1,974.00)	394.80
SOAP, PWDR DETTERGENT LAUNDRY	æ	33.00	0.12	36.96	36.30	(3.30)	99.0	234	(772.20)	154.44
SOAP, POWDER INDUSTRIAL	Ϋ́	95.00	0.12	106.40	109.25	(14.25)	(2.85)	560	(7,980.00)	(1,596.00)
TISSUE, FACIAL SOFT PERFUMED	BX	60.00	0.12	67.20	99.00	(00.9)	1.20	156	(936.00)	187.20
OWL DISINFECTANT	BT	218.00	0.12	244.16	250.70	(32.70)	(6.54)	936	(30,607.20)	(6,121.44)
WASTEBASKET, PLASTIC W/ COVER	EA	96.00	0.12	107.52	94.56	1.44	12.96	78	112.32	1,010.88
WAX, FLOOR COLORLESS	C	250.00	0.12	280.00	275.00	(25.00)	5.00	144	(3,600.00)	720.00
WAX, FLOOR RED	CN	260.00	0.12	291.20	286.00	(26.00)	5.20	144	(3,744.00)	748.80
CASSEROLE (MEDIUM)	EA	430.00	0.12	481.60	516.00	(86.00)	(34.40)	78	(6,708.00)	(2,683.20)
ACETATE, PLASTIC SHEET #3	RL	652.00	0.12	730.24	661.78	(9.78)	68.46	78	(762.84)	5,339.88
ACETATE, PLASTIC SHEET #6	RL	1,416.00	0.12	1,585.92	1,437.24	(21.24)	148.68	78	(1,656.72)	11,597.04
BOOK, RCRD 150 PAGES, NON- BLOT	Ę	55.00	0.12	61.60	55.83	(0.83)	5.78	1560	(1,287.00)	9,009.00
BOOK, RCRD 200 PAGES, NON- BLOT	Ę	58.00	0.12	64.96	58.87	(0.87)	6.09	936	(814.32)	5,700.24
BOOK, RCRD 300 PAGES, NON- BLOT	Æ	73.00	0.12	81.76	74.10	(1.10)	7.67	936	(1,024.92)	7,174.44
BOOK, RCRD 500 PAGES, NON- BLOT	EA	102.95	0.12	115.30	104.49	(1.54)	10.81	936	(1,445.42)	10,117.93
CARD, INDEX 5 X 8	PG	54.00	0.12	60.48	54.81	(0.81)	5.67	156	(126.36)	884.52
CARD, INDEX 5 X 8	PG	56.00	0.12	62.72	56.84	(0.84)	5.88	156	(131.04)	917.28
CARD, STOCK RECORD FORM	EA	2.20	0.12	2.46	2.23	(0.03)	0.23	534	(17.62)	123.35
CARD, STOCK RECORD FORM	EA	5.45	0.12	6.10	5.53	(0.08)	0.57	534	(43.65)	305.58
CARTOLINA, ASSORTED COLOR	EA	5.50	0.12	6.16	5.23	0.28	0.94	1036	284.90	968.66
CARTOLINA, BLUE	EA	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21
CARTOLINA, GREEN	EA	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21

9310-00-223- 0371	CARTOLINA, PINK	<b>a</b>	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21
9310-PN-000- 0049	CARTOLINA, RED	ā	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21
9310-00-090- 2977	CARTOLINA, WHITE	EA	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21
9310-00-223- 0372	CARTOLINA, YELLOW	A	5.40	0.12	6.05	5.13	0.27	0.92	156	42.12	143.21
7510-PH-000- 0055	CLIP, PAPER WIRE (JUMBO)	×	22.00	0.12	24.64	22.33	(0.33)	2.31	624	(205.92)	1,441.44
7510-PH-009- 0050	COLUMNAR PAD, 12 COLUMNS	PO	48.00	0.12	53.76	48.72	(0.72)	5.04	312	(224.64)	1,572.48
7510-PH-009- 0080	COLUMNAR PAD, 18 COLUMNS	PD	60.00	0.12	67.20	60.90	(06.0)	6.30	312	(280.80)	1,965.60
7510-PH-000- 0058	CORRECTING FLUID, STENCIL	BT	72.50	0.12	81.20	73.59	(1.09)	7.61	156	(169.65)	1,187.55
7510-XL-010- 0020	CORRECTION FLUID, SNOPAKE TU	5	42.90	0.12	48.05	43.54	(0.64)	4.50	156	(100.39)	702.70
7520-XL-002- 0020	CUTTER, HEAVY DUTY RETRACTABLE	EA	162.00	0.12	181.44	164.43	(2.43)	17.01	78	(189.54)	1,326.78
7510-PN-000- 4079	DEVELOPER, REX ROTARY 7315Z	Æ	2,495.00	0.12	2,794.40	2,532.43	(37.43)	261.98	37	(1,384.73)	9,693.08
7510-PN-000- 4099	DEVELOPER, REX ROTARY 8225Z	Ę	2,495.00	0.12	2,794.40	2,532.43	(37.43)	261.98	37	(1,384.73)	9,693.08
7440-PN-000- 3807	DISKETE, 3 1/2" DS, HD	BX	215.00	0.12	240.80	218.23	(3.22)	22.58	78	(251.55)	1,760.85
7440-PN-000- 3806	DISKETE, 5.5 DS HD	BX	300.00	0.12	336.00	304.50	(4.50)	31.50	78	(351.00)	2,457.00
7510-PN-000- 4657	DRUM, SOLENIUM, XEROX COPIER 8116Z	Ę	12,480.00	0.12	13,977.60 12,667.20	12,667.20	(187.20)	1,310.40	12	(2,246.40)	15,724.80
7530-PN-000- 0083	EDP PLASTIC FOLDER LONG (BLUE)	Æ	70.00	0.12	78.40	71.05	(1.05)	7.35	322	(338.10)	2,366.70
7530-PN-000- 4560	ENVELOPE, CATALOG	BX	202.00	0.12	226.24	205.03	(3.03)	21.21	936	(2,836.08)	19,852.56
7510-PH-014- 0020	ENVELOPE, DOCUMENTARY BROWN LONG	×	1,016.00	0.12	1,137.92	1,031.24	(15.24)	106.68	156	(2,377.44)	16,642.08
7510-PH-014- 0010	ENVELOPE, DOC BROWN SHORT	₹	750.00	0.12	840.00	761.25	(11.25)	78.75	78	(877.50)	6,142.50
7530-PN-000- 0784	ENVELOPE, EXPANDING WI STRING	EA	9.50	0.12	10.64	9.64	(0.14)	1.00	3744	(533.52)	3,734.64
7530-PN-000- 4006		E	11.00	0.12	12.32	11.17	(0.16)	1.16	5360	(884.40)	6,190.80
7530-XL-001- 3073	ENVELOPE, MAILING BROWN LONG	æ	220.00	0.12	246.40	223.30	(3.30)	23.10	288	(950.40)	6,652.80

7530-PH-000- 1154	ENVELOPE, PLAIN MAILING WHT LONG	æ	220.00	0.12	246.40	223.30	(3.30)	23.10	144	(475.20)	3,326.40
7510-XL-000- 0084	ERASER, TOUCH & GO TYPERYTER	A	25.00	0.12	28.00	25.38	(0.38)	2.63	468	(175.50)	1,228.50
7510-PH-000- 0085	FASTENER, PAPER METAL	BX	32.00	0.12	35.84	32.48	(0.48)	3.36	312	(149.76)	1,048.32
7510-PH-017- 0010	FASTENER, PAPER PLASTIC	æ	24.00	0.12	26.88	24.36	(0.36)	2.52	312	(112.32)	786.24
7510-PN-000- 4019	FOLDER, COMPUTER 14 7/8 X 11 7/8	Æ	43.00	0.12	48.16	43.65	(0.65)	4.52	312	(201.24)	1,408.68
7510-PN-000- 4020	FOLDER, FILE COVER	EA	198.80	0.12	222.66	201.78	(2.98)	20.87	156	(465.19)	3,256.34
7530-PH-000- 1169	FOLDER, FILE LONG WHITE	EA	4.00	0.12	4.48	4.06	(0.06)	0.42	2100	(126.00)	882.00
7530-PN-018- 1168	FOLDER, FILE SHORT	EA	4.20	0.12	4.70	4.26	(0.06)	0.44	936	(58.97)	412.78
7530-PN-000- 0058	FOLDER, LOOSE LEAF	EA	9.60	0.12	10.75	9.74	(0.14)	1.01	936	(134.78)	943.49
7510-PH-018- 0120	FOLDER, MOROCCO (9 X 12")	EA	7.44	0.12	8.33	7.55	(0.11)	0.78	936	(104.46)	731.20
7510-PH-018- 0050	FOLDER, MOROCCO LONG (9 X 13 1/2")	EA	10.00	0.12	11.20	10.15	(0.15)	1.05	936	(140.40)	982.80
7520-PH-018- 0020	FOLDER, PRESS BOARD PLAIN	EA	13.75	0.12	15.40	13.96	(0.21)	1.44	936	(193.05)	1,351.35
7510-XL-055- 0010	GLUE, WHITE	ВТ	13.50	0.12	15.12	13.70	(0.20)	1.42	112	(22.68)	158.76
7510-PN-000- 5906	GRAPHING PAPER	E	250.00	0.12	280.00	253.75	(3.75)	26.25	78	(292.50)	2,047.50
7510-PH-000- 0883	ILLUSTRATION BOARD 20 X 30"	E	27.50	0.12	30.80	27.91	(0.41)	2.89	082	(321.75)	2,252.25
7510-XL-019- 0010	ILLUSTRATION BOARD 30 X 40" 2 PLY	EA	68.00	0.12	76.16	69.02	(1.02)	7.14	780	(795.60)	5,569.20
7510-XL-023- 0010	INDEX TAB SELF ADHESSIVE	Ϋ́	55.00	0.12	61.60	55.83	(0.83)	5.78	312	(257.40)	1,801.80
7510-PN-000- 3194	INK, COMPUTER HP51645G BLACK	ర	1,560.00	0.12	1,747.20	1,583.40	(23.40)	163.80	24	(561.60)	3,931.20
7510-XL-013- 0010	<u> </u>	ВТ	61.50	0.12	68.88	62.42	(0.92)	6.46	82	(71.96)	503.69
7510-PN-000- 4109		J	165.00	0.12	184.80	167.48	(2.47)	17.33	78	(193.05)	1,351.35
7510-PH-000- 0099	INK, DUPLICATING BLK (GESTENER)	1	192.00	0.12	215.04	194.88	(2.88)	20.16	78	(224.64)	1,572.48
7510-PH-000- 0117	INK, STAMP VIOLET	ВТ	20.48	0.12	22.94	20.79	(0.31)	2.15	8/2	(23.96)	167.73

885.75	274.37	286.65	270.27	655.20	20,412.00	27,216.00	4,963.14	6,961.50	6,117.93	5,926.28	7,125.30	6,535.62	5,323.50	5,536.44	2,751.84	1,638.00	23,436.00	18,144.00	19,656.00	17,690.40	1,395.58
(126.54)	(39.19)	(40.95)	(38.61)	(93.60)	(2,916.00)	(3,888.00)	(709.02)	(994.50)	(873.99)	(846.61)	(1,017.90)	(933.66)	(760.50)	(790.92)	(393.12)	(234.00)	(3,348.00)	(2,592.00)	(2,808.00)	(2,527.20)	(199.37)
78	78	78	78	156	1440	1440	78	78	78	78	78	78	78	78	78	78	1440	1440	1440	312	156
11.36	3.52	3.68	3.47	4.20	14.18	18.90	63.63	89.25	78.44	75.98	91.35	83.79	68.25	70.98	35.28	21.00	16.28	12.60	13.65	56.70	8.95
(1.62)	(0.50)	(0.52)	(0.49)	(0.60)	(2.03)	(2.70)	(60.6)	(12.75)	(11.21)	(10.85)	(13.05)	(11.97)	(9.75)	(10.14)	(2.04)	(3.00)	(2.32)	(1.80)	(1.95)	(8.10)	(1.28)
109.77	34.00	35.53	33.50	40.60	137.03	182.70	615.09	862.75	758.21	734.45	883.05	809.97	659.75	686.14	341.04	203.00	157.33	121.80	131.95	548.10	86.48
121.13	37.52	39.20	36.96	44.80	151.20	201.60	678.72	952.00	836.64	810.43	974.40	893.76	728.00	757.12	376.32	224.00	173.60	134.40	145.60	604.80	95.42
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
108.15	33.50	35.00	33.00	40.00	135.00	180.00	606.00	850.00	747.00	723.60	870.00	798.00	650.00	676.00	336.00	200.00	155.00	120.00	130.00	540.00	85.20
SE	Ą	₹	ā	8	Z.	£ ∑	ă m	BX	BX	ă m	ă	ă	ă	ă	æ	% ∑	Z.	Z.	R.	×	占
MARKER FOR TRANPARENCY	MARKER, BLUE REFLECTORIZED	MARKER, ORANGE REFLECTORIZED	MARKER, GREEN REFLECTORIZED	MEMO PAD	PAPER MIMEO A-4 BROWN	PAPER, BOND SUBS 20 (A-4)	PAPER, CONT FORM 11 X 10 5/8 1 PLY		PAPER, CONT FORM 11 3 PLY	PAPER, CONT FORM 11 1 PLY	PAPER, CONT FORM 11 X 14 7/8 2 PLY	PAPER, CONT FORM 11 X 14 7/8 3 PLY	PAPER, CONT FORM 11 X 9 1/2 2 PLY	PAPER, CONT FORM 11 X 9 1/2 3 PLY	PAPER, CONT FORM 11 X 9 1/2 1 PLY	PAPER, COPIER SUBS 20 (A-4)	PAPER, MIMEO SUBS 20 A-4	PAPER, ONION SKIN SUBS 10 A-4	PAPER, ONION SKIN SUBS 10 A-5	PAPER, STENCIL GESTETNER	PAPER, TAPE PERFORATOR
7510-XL-028- 0120	7510-PN-000- 4072	7510-PN-000- 3915	7510-PN-000- 3916	7530-PN-000- 1372	7530-PN-000- 5823	7510-PH-031- 0010	7530-PN-000- 5136	7530-PN-000- 4027	7530-PN-000- 4026		7530-PN-000- 3911	7530-PN-000- 3889	7530-PN-000- 3948	7530-PN-000- 3949	7530-PN-000- 3947	7510-PH-031- 0290	7510-PH-031- 0220	7510-PH-031- 0280	7510-PH-031- 0280	7510-PH-043- 0050	7530-PN-000- 2345

4,668.30	5,208.84	1,008.00	2,109.24	4,540.54	3,276.00	25,552.80	840.00	961.70	3,891.89	2,009.83	2,653.56	1,945.94	1,769.04	2,997.54	1,867.32	4,668.30	4,078.62	7,891.88	16,904.16	1,392.30	22,882.86
(666.90)	(744.12)	(144.00)	(301.32)	(648.65)	(468.00)	(3,650.40)	(120.00)	(137.39)	(555.98)	(287.12)	(379.08)	(277.99)	(252.72)	(428.22)	(266.76)	(06:999)	(582.66)	(1,127.41)	(2,414.88)	(198.90)	(3,268.98)
156	156	100	24	1248	1248	156	000	258	936	936	936	936	936	936	936	936	936	936	936	78	78
29.93	33.39	10.08	87.89	3.64	2.63	163.80	0.84	3.73	4.16	2.15	2.84	2.08	1.89	3.20	2.00	4.99	4.36	8.43	18.06	17.85	293.37
(4.27)	(4.77)	(1.44)	(12.55)	(0.52)	(0.38)	(23.40)	(0.12)	(0.53)	(0.59)	(0.31)	(0.41)	(0:30)	(0.27)	(0.46)	(0.29)	(0.71)	(0.62)	(1.20)	(2.58)	(2.55)	(41.91)
289.28	322.77	97.44	849.56	35.17	25.38	1,583.40	8.12	36.03	40.19	20.76	27.41	20.10	18.27	30.96	19.29	48.21	42.12	81.50	174.58	172.55	2,835.91
319.20	356.16	107.52	937.44	38.81	28.00	1,747.20	8.96	39.76	44.35	22.90	30.24	22.18	20.16	34.16	21.28	53.20	46.48	89.94	192.64	190.40	3,129.28
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
285.00	318.00	96.00	837.00	34.65	25.00	1,560.00	8.00	35.50	39.60	20.45	27.00	19.80	18.00	30.50	19.00	47.50	41.50	80.30	172.00	170.00	2,794.00
꿉	밂	EA	EA	PD	PO	PC	BX	BT	Ą	EA	EA	EA	EA	EA	EA	EA	Ð	ZQ	ZQ	EA	EA
PAPER, TELETYPE 2 PLY	PAPER, TELETYPE 3 PLY	PAPER, THERMAL FAX MACHINE	PAPER, TRACING	PAPER, WHITE RULED PAD	PAPER, YELLOW WRITING	PARALLEL RULER, FIBERGLASS 36" LONG	PARCHMENT PAPER 8 1/4 X 11 3/4	PASTE, WATER WELL BIG	PEN MARKER, BLK WHITEBOARD	PEN MARKER, BLUE WHITEBOARD	PEN, BALL POINT BLK	PEN, BALL POINT BLUE	PEN, BALL POINT RED	PEN, PENTEL BLK	PEN, PENTEL RED	PEN, SIGN BLK	PEN, SIGN BLUE	PENCIL, W/ ERASER MONGOL#2	PENCIL, GREASE ASSORTED COLOR	PERPORATOR (PUNCHER)	PRINTER, HEAD COMPUTER (EPSON)
7530-PH-000- 2462	7530-PH-000- 2463	7530-PN-000- 4166	7530-PN-000- 3183	7510-PH-031- 0330	7530-PH-000- 1232	-60	-000	7510-PN-000- 0066	7510-PN-000-	7510-PN-000-	7520-PH-000- 0412	7520-PH-000- 0413	7520-PH-000- 0416	7510-PN-000- 0055	7510-PN-000- 1008	7510-PN-000- 0087	7510-XL-038- 0010	7510-PH-033- 0010	7510-PN-000- 0020	7520-PH-001- 1867	7440-PN-000- 4605

187.49	6,224.40	6,552.00	1,801.80	5,077.80	556.92	3,931.20	7,998.48	589.68	540.54	1,474.20	368.55	86.00	2,948.40	7,780.50	3,243.24	600.49	1,375.92	371.17	3,046.68	761.67	278.46
(26.78)	(889.20)	(936.00)	(257.40)	(725.40)	(79.56)	(561.60)	(1,142.64)	(84.24)	(77.22)	(210.60)	(52.65)	(12.29)	(421.20)	(1,111.50)	(463.32)	(85.78)	(196.56)	(53.02)	(435.24)	(108.81)	(39.78)
144	312	312	78	312	312	936	144	144	78	39	78	78	78	26	156	312	936	156	156	156	156
1.30	19.95	21.00	23.10	16.28	1.79	4.20	55.55	4.10	6.93	37.80	4.73	1.10	37.80	299.25	20.79	1.92	1.47	2.38	19.53	4.88	1.79
(0.19)	(2.85)	(3.00)	(3.30)	(2.32)	(0.25)	(0.60)	. (7.93)	(0.59)	(0.99)	(5.40)	(0.67)	(0.16)	(2.40)	(42.75)	(2.97)	(0.27)	(0.21)	(0.34)	(2.79)	(0.70)	(0.25)
12.59	192.85	203.00	223.30	157.33	17.26	40.60	536.94	39.59	66.99	365.40	45.68	10.66	365.40	2,892.75	200.97	18.60	14.21	23.00	188.79	47.20	17.26
13.89	212.80	224.00	246.40	173.60	19.04	44.80	592.48	43.68	73.92	403.20	50.40	11.76	403.20	3,192.00	221.76	20.53	15.68	25.38	208.32	52.08	19.04
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
12.40	190.00	200.00	220.00	155.00	17.00	40.00	529.00	39.00	66.00	360.00	45.00	10.50	360.00	2,850.00	198.00	18.33	14.00	22.66	186.00	46.50	17.00
E	CA	۲	귐	ā	SL	^Q	EA	PC	EA	EA	EA	EA	EA	RL	RL	RL	R	RL	RL	RL	占
RIBBON, ADDING MACHINE NYLON	RIBBON, COMPUTER PRINTER	RIBBON, COMPUTER PRINTER LX-300/800	RIBBON, CORRECTIBLE CASSETTE IBM	RIBBON, IBM ELECTRIC BLK	RIBBON, TYPEWRITER MANUAL	ROUTINE SLIP SIZE 1/4	RULER, PARALLEL FOLDING TYPE 18"	RULER, PLASTIC 18"	SCISSOR, 7"	SHARPENER, PENCIL	STAMP PAD #1	STAPLE WIRE REMOVER	STAPLER MACHINE #444	STITCHING WIRE #22	TAPE, MASKING 3"	TAPE, 3/4" SCOTCH	TAPE, ADDING MACHINE WHITE SUBS #18	TAPE, MASKING 1"	TAPE, MASKING 2"	TAPE, MASKING 3"	TAPE, MASKING 3/4"
7510-00-162- 3016	7510-PN-000- 3918	7510-PN-000- 5309	7510-PN-000- 3865	7510-PN-000- 0584	7510-PH-035- 0040	7530-PN-000- 1371	6675-00-191- 1509	7510-PH-036- 0020	7510-PH-037- 0010	7520-PH-000- 0580	7510-PH-000- 0515	7510-00-162- 6177	7520-PH-000- 0581	7510-PN-000- 5847	510-PN-000- 4138	7510-PH-001- 1721	7530-PH-000- 2590	7510-XL-001- 1746	7510-XL-001- 1753	7510-XL-001- 1757	7510-XL-001- 1744

737.10	573.30	409.50	327.60	188.37	4,788.00	4,485.60	6,552.00	5,508.72	19,057.50	3,931.20	429.98	3,538.08	.913.50	2,782.50	2,763.60	3,813.08	6,411.55	110.25	241.50	432.43	1,556.10
(105.30)	(81.90)	(58.50)	(46.80)	(26.91)	(684.00)	(640.80)	(936.00)	(786.96)	(2,722.50)	(561.60)	(61.43)	(505.44)	(130.50)	(397.50)	(394.80)	(544.72)	(915.94)	(15.75)	(34.50)	(61.78)	(222.30)
156	156	156	156	156	24	24	24	24	24	78	780	780	8	2	7	2	7	3	10	78	78
4.73	3.68	2.63	2.10	1.21	199.50	186.90	273.00	229.53	794.06	50.40	0.55	4.54	304.50	556.50	394.80	762.62	915.94	36.75	24.15	5.54	19.95
(0.67)	(0.52)	(0.38)	(0:30)	(0.17)	(28.50)	(26.70)	(39.00)	(32.79)	(113.44)	(7.20)	(0.08)	(0.65)	(43.50)	(79.50)	(56.40)	(108.95)	(130.85)	(5.25)	(3.45)	(0.79)	(2.85)
45.68	35.53	25.38	20.30	11.67	1,928.50	1,806.70	2,639.00	2,218.79	7,675.94	487.20	5.33	43.85	2,943.50	5,379.50	3,816.40	7,371.95	8,854.05	355.25	233.45	53.59	192.85
50.40	39.20	28.00	22.40	12.88	2,128.00	1,993.60	2,912.00	2,448.32	8,470.00	537.60	5.88	48.38	3,248.00	5,936.00	4,211.20	8,134.56	9,769.98	392.00	257.60	59.14	212.80
0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
45.00	35.00	25.00	20.00	11.50	1,900.00	1,780.00	2,600.00	2,186.00	7,562.50	480.00	5.25	43.20	2,900.00	5,300.00	3,760.00	7,263.00	8,723.20	350.00	230.00	52.80	190.00
꿉	RL	R	교	×	EA	T.	S	2	Ą	PG	×	X	Æ	\$	Ą	EA	A	EA	EA	EA	ā
TAPE, PACKAGING 2" 45 METERS	TAPE, SCOTCH 2"	TAPE, SCOTCH 3/4"	TAPE, SCOTCH 1" TRANSPARENT	THUMBTACKS	TONER, COPIER MACH REX ROTARY 7315Z	TONER, COPIER MACH REX ROT 8116Z,UR	TONER, COPIER MACH REX ROTARY 8225Z	TONER, COPIER RR 8215Z	TONER, MITA MODEL DC3060		WIRE, STAPLE #10	WIRE. STAPLE #35	BATTERY, STORAGE 2SMF 9 PLATES 12V	BATTERY, STORAGE 3SMF 11 PLATES 12V	BATTERY, STORAGE 4D 21 PLATES 12V	BATTERY, STORAGE 6SMF 15 PLATES 12V	BATTERY, STORAGE 6TN 19 PLATES A2 V	BATTERY, STORAGE 8D 31 PLATES 12V	BLADE WIPER	CABLE CLUTCH 4K	CONDENCER
7510-00-079- 7906	7510-PN-000- 4393	7510-PH-001-	7510-XL-001-	7510-PH-000-	7510-PN-000- 4003	7510-PN-000- 4108	7510-PN-000- 4609	7510-PN-000-	7510-PN-000-	7510-PN-000-	7510-XL-001-	7510-PH-000-	6140-PH-001-	6140-PH-001-	6140-PH-001- 3423	6140-PN-000- 4129	6140-PN-000-	6140-00-190-	2540-PN-000- 2012	2920-PN-000- 3002	5910-PN-000- 2335

2920-JP-000- 3283	CONTACT SET DISTRIBUTOR	E	230.00	0.12	257.60	233.45	(3.45)	24.15	78	(269.10)	1,883.70
3439-00-465- 1914	ELECTROD WELDING	EA	90.00	0.12	100.80	91.35	(1.35)	9.45	234	(315.90)	2,211.30
2910-JP-000- 8539	FILTER ASSY FUEL	EA	675.00	0.12	756.00	685.13	(10.13)	70.88	117	(1,184.63)	8,292.38
2910-PN-000- 3174	FUEL FILTER GAUGE, TIRE 120 PSI PEN TYPE	ā	400.00	0.12	448.00	406.00	(0.00)	42.00	78	(468.00)	3,276.00
2920-PN-000- 3482	HOSE, RUBBER RADIATOR OUTLET	EA	80.00	0.12	89.60	81.20	(1.20)	8.40	42	(50.40)	352.80
2930-JP-000- 2826	JACK, HYDRAULIC/ 2 TON	EA	1,380.00	0.12	1,545.60	1,400.70	(20.70)	144.90	7.8	(1,614.60)	11,302.20
2920-JP-000- 3325	SPARK PLUG 14 X 19	EA	90.00	0.12	100.80	91.35	(1.35)	9.45	560	(756.00)	5,292.00
2920-JP-000- 3325	SPARK PLUG 14 X 20	EA	98.00	0.12	109.76	99.47	(1.47)	10.29	560	(823.20)	5,762.40
2920-PN-000- 2961	SPARK PLUG LONG TIP	EA	90.00	0.12	100.80	91.35	(1.35)	9.45	560	(756.00)	5,292.00
2530-US-001- 1325	TIE ROD END ASSY LH	SE	630.00	0.12	705.60	639.45	(9.45)	66.15	78	(737.10)	5,159.70
2610-00-050- 9840	TIRE, 600 X 9, 10PLY W/ INTERIOR	E	3,192.00	0.12	3,575.04	3,239.88	(47.88)	335.16	24	(1,149.12)	8,043.84
2610-00-204-	TIRE,700 X 12, 12PLY W/ INTERIOR	EA	4,920.00	0.12	5,510.40	4,993.80	(73.80)	516.60	24	(1,771.20)	12,398.40
2610-PN-000- 3188	TIRE, 750 X 14, 8PLY	EA	3,200.00	0.12	3,584.00	3,248.00	(48.00)	336.00	24	(1,152.00)	8,064.00
2610-PH-001- 9151	TIRE, EXT 700 X 15 8 PLY	EA	3,080.00	0.12	3,449.60	3,126.20	(46.20)	323.40	12	(554.40)	3,880.80
2610-PN-000- 3589	TIRE, EXT 6.5 X 13	EA	1,950.00	0.12	2,184.00	1,979.25	(29.25)	204.75	12	(351.00)	2,457.00
2610-PH-000- 4138	TIRE, INT 600 X 16	EA	252.00	0.12	282.24	255.78	(3.78)	26.46	24	(90.72)	635.04
2610-PN-000- 3916	TIRE, INT 175 X 13	EA	365.00	0.12	408.80	370.48	(5.48)	38.33	12	(65.70)	459.90
2610-PN- 0003189	TIRE, INT 700 X 15 M151	EA	308.00	0.12	344.96	312.62	(4.62)	32.34	12	(55.44)	388.08
2610-PH-001- 5693	TIRE, INT 900 X 20	EA	577.00	0.12	646.24	585.66	(8.65)	60.59	24	(207.72)	1,454.04
2610-PH-001- 3648	TIRE, PNEU 165 X 13 4 PLY	EA	2,321.55	0.12	2,600.14	2,356.37	(34.82)	243.76	12	(417.88)	2,925.15
2610-PH-001- 5653	TIRE, PNEU 175 X 13 4 PLY	Æ	2,185.00	0.12	2,447.20	2,217.78	(32.78)	229.43	12	(393.30)	2,753.10
2610-PN-000- 5561	TIRE, PNEU 185 X 13 4 PLY	A	2,310.00	0.12	2,587.20	2,344.65	(34.65)	242.55	12	(415.80)	2,910.60

1,312,045.90				RSD	s sold at	ove item	st if ab	DO SEGUA		Total Cov't excess cost if above items sold at RSD	
	(538,904.07)		0	d at RSI	procure	ove items	s if ah	e' eaving		VOLINGE NEGOCIFIED TO THE SERVING If SHOWN Items procured at RSD	3340
1,474.20		36	40.95 36	(5.85)	395.85	436.80 395.85	0.12	390.00	Ā	A DEG BEG A	2920-JP-000-
								2000	3	GENERALOR	3432
2,268.00	(324.00)	24	94.50	(13.50)	913.50	ce ann no 0.12   1.008.00   913.50 (13.50)   94.50   24	0.12	00 000	Ü	V-BELT FOR FAN AND	3030-JP-000-
						2	3	0,020,0	5	TIRE, PNEU 900 X 20 14 PLT	8606
8,593.20	715.7.0   5.4   5.00   0.12   7.638.40   6.922.30   (102.30)   716.10   12   (1,227.60)	12	716.10	(102.30)	6.922.30	7 638 40	0 12	00 000	Ĺ		2610-XL-001-
						2001	3	2,330.00	5	TIRE, PNEU 185//0 X 14 4 PLT	8789
3,213.00	(459.00)	12	267.75	(38.25)	2 588 25	2 856 00	0 12	00 032 0	í	2 267.75 (38.25) 267.75 12	2610-PH-001-

Source: Developed by the Researcher

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX C: SURVEY QUESTIONNAIRE

From: LT JOSE ERNESTO B GAVIOLA To: Survey Respondent
Subj: Survey
Encl: Survey Questionnaire
1. Attached is a survey I am administering for my thesis at the Naval Postgraduate School. My research is an analysis of Philippine Fleet RSD operation. The purpose of the study is to identify and analyze the problems encountered in the operation of the RSD in order to enhance the Philippine Fleet effectiveness in providing consumable supplies to the end users.
2. In this connection, request you answer each question truthfully and completely.
3. This is just a survey. There are no right or wrong answers; the only correct answers are those that truthfully reflect your opinion about the questions.
4. The answers will not be attributed to you. Your name is not required. What are needed are your thoughts and ideas about the subject.
SURVEY QUESTIONNAIRE
Rank Branch of Service Station: Manila Cavite
Position Unit/Office
Have you performed tasks/duties as supply officer?  [ ]Yes [ ]No  If yes, When
Where
If your answer is YES proceed and answers questions 3-14. Otherwise discontinue

<i>3</i> .	1
4.	What are the most common items your unit purchases from RSD?  Tools Office Supplies Janitorial Supplies Clothing Athletics Supplies Cooking Supplies Others
5.	How accessible is the RSD outlet to your unit?  Less than 1 Kilometer  1-3 Km  3-5 Km  Others (specify)
6.	Do you find yourself purchasing material that is not meeting 100% of your expectations due to RSD's selection? alwaysoftenoccasionallyseldomnever
7.	Are you satisfied with the items availability rate at RSD? [ ]Yes [ ]No
8.	Does RSD provide the best available quality at the lowest price?  [ ]Yes [ ]No
9.	What benefits do you gain from using RSD? You can check more than one.  Accessibility and convenience Less paper work Cheaper prices Familiarity in procedures Variety of items Short waiting time to acquire items Customer service Others (specify)

10.	What benefit(s) could you gain by using a local vendor as to compare with RSD?  Accessibility and convenience  Better quality  Cheaper prices  Better selection  Variety of items  Short waiting time to acquire items
	Customer service
	Others (specify)
11.	Are you willing to forego the benefit(s) if you can get the same item at a lower price at a local commercial vendor?  [ ]Yes [ ]No
12.	Are you willing to forego the benefit(s) if you can get the same item at the same price at a local commercial vendor?  [ ]Yes [ ]No
13.	If the RSD was eliminated in your area, could you still carry out your mission with the use of local vendors?  [ ]Yes [ ]No
14.	What suggestion can you offer to improve the RSD operation?

Thank you very much for your cooperation.

THIS PAGE INTENTIONALLY LEFT BLANK

### APPENDIX D. SUMMARY OF OMB CIRCULAR A-76

The Office of Management and Budget (OMB) Circular A-76 was first published in 1951, which governs the competition process. The OMB Circular A-76, "Performance of Commercial Activities", established Federal policy for the performance of recurring commercial activities. A commercial activity is "the process resulting in a product or service that is or could be obtained from a private sector." Janitorial services, maintenance services, and grounds keeping are examples of such commercial OMB Circular A-76. This circular is not designed to simply contract out government functions; rather it is designed to:

- 1. Balance the interests of the parties on a make or buy cost comparison.
- 2. Provide a level playing field between public and private sectors in a competition.
- 3. Encourage competition and choice in the management and performance of commercial activities.

To further demonstrate the use of this circular, the Defense Logistic Agency (DLA) was chosen as an example on how to execute the A-76 process. This was done in the following procedure:

- Depots are chosen based upon their ability, complexity, customer considerations and projected savings.
- Each depot will establish a team to coordinate the A-76 process.
- The team begins by gathering data and interviewing the depot workforce in order to define mission requirements.

The defined mission requirements become the performance Work Statement (PWS).

The government issues a Request for Proposal (RFP), soliciting bids from

the private sector to execute the work in the PWS.

While the government is soliciting commercial vendors, the depot's team

develops the Most Efficient Organization (MEO) required to accomplish the work

in the PWS. The MEO becomes the government's bid in the competition. Depots

and commercial vendors have 18 months to concurrently develop their bids.

An Evaluation Board reviews contractor bids by determining which

contractor best meets the evaluation factors established in the RFP. The

contractors' and government's bids are compared, and the contract is awarded to

the lowest bidder, with one prerequisite. The contractor's bid must better the

government's bid by at least 10% of the personnel cost in order for the contract to

be awarded to the commercial firm.

Source: Developed by the Researcher from United States OMB Circular A-76.

102

#### LIST OF REFERENCES

- 1. Armed Forces of the Philippines. "72-100 Reimbursable Fund Ceiling Allocation" AFP Comptroller Letter, August 24, 1976.
- 2. Philippine Fleet, Circular No. 3." Re-Management Guidelines for Ready Supply Depot", February 1975.
- 3. Armed Forces of the Philippines. "Management of 72-100 RF and 72-100 Supplies." GHQ AFP Circular Nr. 4, August 6, 1974.
- 4. Armed Forces of the Philippines. "AFP Modernization Program", Manila, 1995.
- 5. Telephone conversation between LT Gerlo Elchico, CO AIMU, NAG, Philippine Fleet and the author "Re-RSD Supervisor Comment", 30 September 2000.
- 6. Telephone conversation between LT Paul Marcelo, NAG, Philippine Fleet and the author "Re-RSD Supervisor Comment", 10 October 2000.

THIS PAGE LEFT INTENTIONALLY BLANK

#### **BIBLIOGRAPHY**

- 1. Armed Forces of the Philippines Manual 4-1. "Armed Forces Logistics Management", 1981.
  - 2. Armed Forces of the Philippines Manual 4-2. "Armed Forces Procurement Manual", May 1994.
  - 3. Armed Forces of the Philippines. "Guidelines in the Handling and Utilization of Proceeds on Sale of 72-100 Stocks", AFP Comptroller Letter 88-8 dated 6 October 1988.
- 4. Armed Forces of the Philippines. "Bids, Awards and Negotiation Committee (BANC)." AFP Standard Operating Procedure No. 2. Manila, 1997.
- 5. Armed Forces of the Philippines. "Armed Forces of the Philippines Comptroller Manual", 1994.
- 6. Commission on Audit of the Philippines. "Government Accounting and Auditing Procedure", Manila.
- 7. Congress of the Philippines. "An Act Providing for the Modernization of the Armed Forces of the Philippines and for Other Purposes." Republic Act Number 7898. Manila, 1995.
- 8. Dowell, B.J., "Are there cost effective Alternatives to Navy Ready Stores?" Master's Thesis. Naval Postgraduate School, December 1996.
- 9. Espera Jr, R.P., "An Assessment of the PN 72-100 Reimbursable Fund"

  Commandant's Paper. AFP Command and General Staff Course Cl-40, October 1995.
- 10. Kobert, N. Managing Inventory for Cost Reduction. New Jersey, USA: Prentice Hall LTD, 1992.
- 11. Philippine Fleet, Circular No. 3." Re-Management Guidelines for Ready Supply Depot", February 1975.
- 12. Philippine Navy Manual 4-2. "Supply Ashore", July 1979.
- 13. Philippine Navy Operating Program and Budget, 1999.

- 14. Remenyi, D., Williams, B., Money, A and Swartz, E. Doing Research in Business and Management, An Introduction to Process and Method. London: SAGE Publications LTD, 1998.
- 15. United States Office of Management and Budget. "Supplement, OMB Circular A-76", August 1983.

## INITIAL DISTRIBUTION LIST

1.	Defense Technical Information Center
2.	Dudley Knox Library
	Monterey, Camorina 75745-5101
3.	Professor Douglas Moses, Code SM/MO
4.	CDR Kevin J. Maher, USN, Code OR/MK
5.	LT Jose Ernesto B. Gaviola PN